NO TITLE-PAGE & INDEX ISSUED

L31
J292
1
LIBRARY OF CONGRESS
JUL 5 1904
PERIOD

# The American Artisan
## AND HARDWARE RECORD

Vol. 48—No. 1. CHICAGO, JULY 2, 1904. $2.00 Per Year.


**BOLTS**

NUTS, WASHERS, CLIP TIES, FELLOE PLATES, CORNER IRONS AND
**CARRIAGE FORGINGS**
Write for our general Catalogue
COLUMBUS BOLT WORKS, Columbus, O.

**PURE ASPHALT ROOFING** — NEVER DRIES OUT OR CRACKS — Our Tarred Ready Roofing, Slaters' Felt, Building Paper, Roofing Cements, Paints, Etc.
WRITE US FOR PRICES
J. L. PERKINS & CO., 235 Lake Street, CHICAGO

**LEAKY ROOFS**

Are expensive to repair, and if neglected will cause a considerable amount of trouble. If a roof has some small leak or break, have it fixed at once or it will give trouble in the near future. In order to stop these leaks it is necessary to obtain

**Elastic Oil Cement—American Seal**

brand—and apply it to any leak, small or large. It never hardens. Prices for "American Seal" Elastic Oil Roofing Cement and Roof Paint are reasonable and we feel sure that if you write for them they will interest you.
Agencies: J. L PERKINS & CO., 235 Lake St. CHICAGO, ILL.
STOCKHOFF SUPPLY CO., 107 N. Main St., ST. LOUIS, Mo.

**Tinners Find Employment**
By advertising and using
**THE POWERS AUTOMATIC CHIMNEY TOPS**
They make chimneys draw, give Tinners employment making stocks, and give the dealers profit. Sold by Hardware Jobbers and Dealers
Made only by
POWERS BROS.
Streator, - Ill.
This cut free to dealers.

**NOTICE.**

We have exceptional facilities for handling American products: Hardware, Sanitary, Heating and Ventilating Goods. Branches in England and continent. References furnished.

ADDRESS
EXHIBIT & TRADING CO.
Main Office, 155 Duke St.
LIVERPOOL, - ENGLAND

**Atlas Bolt & Screw Co.**

CLEVELAND, O.
Manufacturers of
Stove Bolts
Stove Rods
Stove Rivets
Mica Bolts
Fancy Nuts
Register Pins
Hinge Pins
and kindred articles for the
STOVE and RANGE
Manufacturing Trade

Crying—to—do—business—without—advertising—is—like—winking—at—a—girl—in—the—dark;—you—know—what—you—are doing—but—nobody—else—does

**Black Diamond Files and Rasps**
PERFECT—ALWAYS
TWELVE MEDALS AWARDED

AT INTERNATIONAL EXPOSITIONS
G. & H. BARNETT CO.
Black Diamond File Works, PHILADELPHIA

**BROWN WELDLESS COW TIES**
Twice as strong as welded chain.

A sample (full length) delivered for **one cent.** Any Retail Dealer sending postal card request with name of Jobber secures sample prepaid.

Sole Manufacturers
**The Bridgeport Chain Co., Bridgeport, Conn.**

TN200 A7

STOVES AND RANGES CINDERELLA NEVER FAIL

*"Here's to the Land that gave us birth*
*Here's to the flag she flies*
*Here's to her sons, the best of Earth*
*And here's to her sunny skies."*

1776 JULY 4th 1904

# When in the Course of Human Events

GOOD LUCK STOVES AND RANGES

It becomes necessary to purchase such Cooking and Heating Apparatus as shall promote the happiness and welfare of your trade, and for you to assume among the merchants of the land, that position which by right of opportunity is yours, a careful consideration of the intrinsic values of

# Pittsburgh Stoves, Ranges and Furnaces

becomes an absolute necessity.

***We Hold These Truths to be Self Evident:***

*That* Pittsburgh offers advantages in the manufacture of iron wares which are unequaled in the world.
*That* our position as the only makers of Stoves in the Pittsburgh district enables us to offer you superior advantages.

*We therefore* declare that our United Lines are and ought to be the most desirable goods for you to handle.

TREMONT STOVES RANGES & FURNACES

## Pittsburgh Stove & Range Co.

PITTSBURGH, PA.

*STOVE MAKERS TO THE AMERICAN PEOPLE.*

CRAFTON STOVES AND RANGES

# Model Steel Range

## With Our New Pouch Feed

**Patented Ventilated Fire Box,**
**Patented Balanced Oven Door**
**Patented Nickeled Kicker**
**(Operated with Foot),**
**Patented Reliable Rolling Damper,**
**Also other distinctive features found on no other Ranges.**
**When talking "Models" you are talking special features.**
**How is it when talking other Ranges?**

There are other points of which we can't tell you here. Write us for more

END VIEW

THE
**Portsmouth Stove & Range Co.**
PORTSMOUTH, OHIO.

**MORLEY BROS.,**
Saginaw, Michigan,
Wholesale Agents for Michigan.

THE BUSIEST MAKERS OF STOVES & RANGES IN THE WORLD

# THE "SNOWFLAKE"

# ROTARY WASHER

**The Acknowledged Superior of All Washing Machines**

FOR DURABILITY, STRENGTH, EASE OF OPERATION AND SIMPLICITY, IT HAS NO EQUAL.

**Each $3.98**

**Each $3.98**

## A Bargain Offer That Is Truly Wonderful

We purchased a large quantity of these superior washers at a price concession that makes them a genuine bargain, and places them in your hands at a remarkable saving. This is a money maker for you. The largest, simplest, strongest, most durable and most easily operated machine on the market. The self-reversing roller-bearing action makes the operation so easy that anyone can do a washing in much less time than is ordinarily required. Washstand, washboard and wringer attachments. We offer these splendid washers at a radical discount from regular prices. Our price, each **$3.98**

TRADE MARK BROTHERS UNDERSELL ALL OTHERS

# LYON BROTHERS

**Madison, Market and Monroe Streets, CHICAGO**

# OUR LINE OF STEEL RANGES AND HEATERS

Has been greatly improved during the present season, and you will be delighted with the finish and style of our new goods.

**581. 18 Champion Monitor Reservoir and High Closet.**

Our new Hot Blast Oak is a beauty and the price is right. Send for sample. If you are not pleased with it, it will belong to us. Catalogue sent by request.

**Monitor Hot Blast Oak No. 147**

**THE WM. RESOR & CO., CINCINNATI, OHIO**

*"In trouble, to be troubled,*
*Is to have your trouble doubled."*

But you will avoid trouble and be happy if you place upon your floor

# WHITE'S BEACON

A HEATER THAT HEATS

A FIRE KEEPER THAT KEEPS FIRE

Don't delay your investigation of the merits of our claims regarding this stove.

**Unique, Original, Durable, Economical, Comfortable, Saleable**

**Consumes smoke, gas, everything**

Write and we will explain.

## THOMAS WHITE STOVE CO.

**QUINCY ILLINOIS**

# ANNOUNCEMENT

We have recently purchased the Patterns, Shop Rights and Patents of the FAMOUS CORTLAND HOWE VENTILATOR, and beg to announce to its many patrons that we have made many improvements to this famous heater. This stove will be made better than ever before, and we solicit a continuance of the valuable trade which it has enjoyed, and will be [very glad to send circulars, prices, etc., upon application.

Very truly yours,

**GALUSHA STOVE CO.** ROCHESTER NEW YORK

## Yes, There is a Way to Get Rich Quick

### A Short Cut

We are "putting you next" to the method. Handle

## Ashland Steel Ranges

# A WINNER

OR A

# RELIANCE

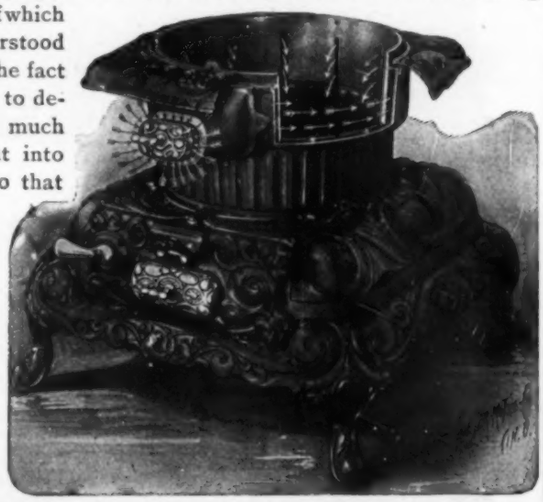
Will make any dealer's show room appear as if the Sun of Prosperity always shone in it.

Write for particulars.

**Ashland Steel Range & Manufacturing Co., Ashland, Ohio**

# CLERMONT AIR TIGHT HOT BLAST

Made in four sizes, 414, 416, 418 and 420 for soft coal, slack, coke, hard coal or wood. Air tight jointless ash box. A great fuel saver carrying fire for 48 hours. **THE CLERMONT AIR TIGHT HOT BLAST FIRE BOWL, HOT BLAST RING,** is moulded in one piece. Narrow perpendicular slots are cast in the Anti-buckling ring, the advantage of which will be quickly understood when you consider the fact that it is impossible to determine just how much coal will be put into the fire bowl, so that it makes no difference whether much or little coal is added, the hot air is always being admitted evenly on all sides.



**GEM CITY STOVE CO., Dayton, Ohio**

High Value

# THE GOLD COIN TWINS

Low Price

**LET THEM DO YOUR RANGE SELLING**

# $23.50

No. 76-18 Merit Gold Coin Polished Steel Range, for coal or wood; duplex grate; reservoir and high closet; six No. 8 griddles; full nickeled. We are making a special price of $23.50 on this blue steel range, **Cash to Accompany Order.**

**CHICAGO STOVE WORKS**

STOVE MAKERS TO THE TRADE

**Blue Island Ave. and 22nd St., CHICAGO**

## PRIZE STEEL RANGES

# Foster

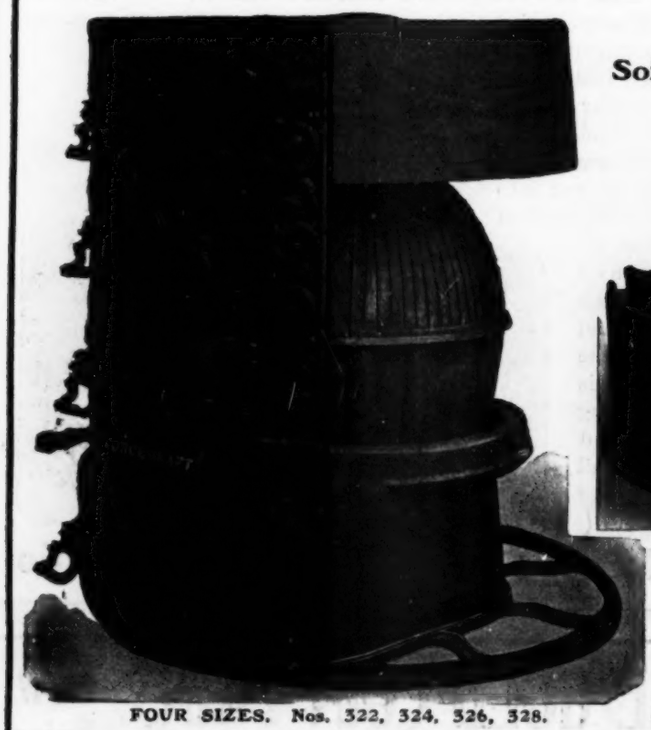
Makes a range that is without a peer. Everything about this new and improved costs no more than ordinary ranges. Order a sample and be convinced. *Send for printed matter.*

**The Foster Stove Co.**

**IRONTON, OHIO**

# THE RADIANT HOME FORCE DRAFT FURNACE

## Original Air Blast Fire Pot with Force Draft Ring



FOUR SIZES. Nos. 322, 324, 326, 328.

Burns every Kind and Quality of

**Soft Coal, Coke and Lignite.**

**PERFECT COMBUSTION.**

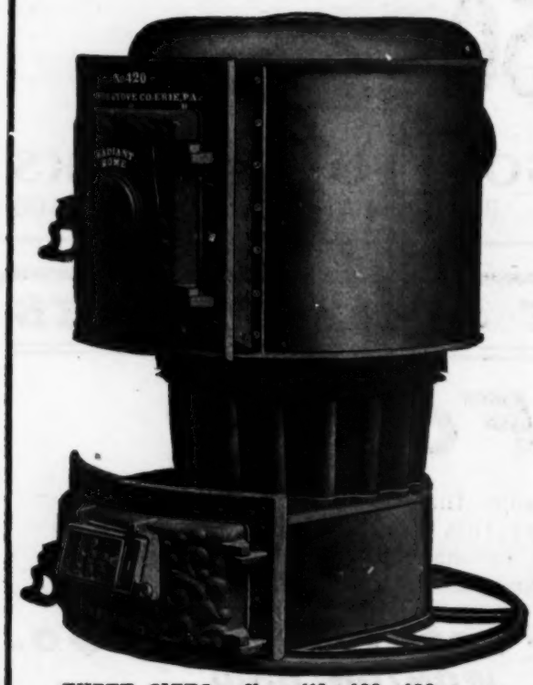
Soft Coal Burned as Cleanly as Hard Coal.

LARGE ONE-PIECE RADIATOR
LARGE DOUBLE FEED DOORS

Most intense heat with cheapest grade of fuel.

FIRE POT GUARANTEED FIVE YEARS.

## Only Correct Method for Burning All Kinds of Soft Coal.



THREE SIZES. Nos. 418, 420, 422.

**A LEADER**

## High Grade, Low Price, Powerful Heater

For Soft Coal, Hard Coal, Coke, Lignite and Wood.

AIR BLAST FIRE POT. LARGE HEAVY RADIATOR.
EXTRA LARGE FEED DOOR.

Can be sold at Retail at less than wholesale price of other makes.

FIRE POT GUARANTEED FIVE YEARS.

## GERMER STOVE COMPANY

Western Branch:
231-247 NEWBERRY AVE.
CHICAGO, ILL.

Main Offices and Foundries:
**Erie, Pa.**

# THE STORM KING FURNACE

is perhaps, a better furnace than you have been accustomed to handle; perhaps it costs a little more—perhaps not—but here's the point; if you can sell more Storm King Furnaces than cheaper furnaces, make more money on them, and have better satisfied customers, isn't the Storm King the most profitable furnace for you to handle?

Now to illustrate from our own experience. We have a very large line of furnaces including almost every style and size for which there is any demand. Some of these furnaces are sold at extremely low prices and yet it is no exaggeration to say that we sell ten Storm King Furnaces to one of the cheaper grades. What's the reason? Simply this: The public has had some very unpleasant experiences with inferior furnaces and it is now willing to pay more for something better.

If Storm King Furnaces are not sold in your town we want you for an agent and we will agree to furnish you with heating plans and estimates free of charge; give practical suggestions regarding the most up-to-date methods of installation; supply you with unique printed matter, and in various ways co-operate with you to secure the heating business in your vicinity.

In addition to furnaces we also manufacture "Ideal" single and double Furnace Pipe and Fittings the "Made Right, Fit Right Kind," and we are Northwestern Distributors of Gem Hot Water and Steam Boilers.

Hadn't you better write us for catalogues and discounts and do it now?

## THE ROBERTS HEATING & VENTILATING CO.

213-217 THIRD AVENUE SOUTH ∴ MINNEAPOLIS, MINN.

DURING THE FORTY-SEVEN YEARS

THAT WE'VE BEEN IN BUSINESS

in not one single instance has the quality of the **MUELLER** Furnace ever been sacrificed in an endeavor to cheapen the manufacturing cost.

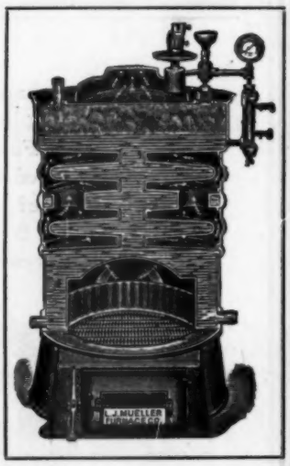
The **Mueller** Furnace can always be depended upon to be the best in principle, the best in efficiency, the best in workmanship and finish—and above all the best in durability.

The **Mueller** is best for the wide-awake furnaceman, too. If you sell **Mueller** furnaces in your town you have the exclusive agency—and a furnace that is sure to please your customers and make money for you.

Just as the **Mueller** Furnace is best for the furnaceman—so is the **Mueller** Boiler best for the Boilerman!

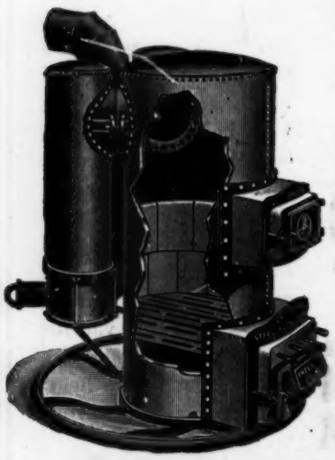
Ask us about the agency for either—or both!

Also write about Floor and Wall Registers.



**L. J. MUELLER FURNACE CO.**

**191 Reed Street MILWAUKEE, WIS.**



## A Solid Sheet of Steel

***That's what our Fire Chamber is.***

It beats them all in durability. Our use of vertical lines in the **Front Rank Furnaces** brings the air in direct contact with the entire heating surface.

These furnaces burn hard or soft coal or coke. We also make wood burning furnaces.

Send for our catalogue; it will give you a better idea of what we make.

**HAYNES-LANGENBERG MFG. CO.** 2301 to 2309 Lucas Ave. ST. LOUIS, MO.

## Emperor Furnaces

**FOR WOOD.**

**Simple, Safe, Durable. Economical in Fuel.**

The Best and Cheapest Line of Wood Furnaces . . .
Furnished for either Brick or Galvanized Iron Casing.

SEND FOR CATALOGUE.

Bergstrom Bros. Co.

**NEENAH, WIS.**

# Triumph HOT WATER HEATER

**JOHN KONTNY**

**65-67 N. Desplaines Street,**

**Western Agent.** **CHICAGO**

*If you wish the best Known*

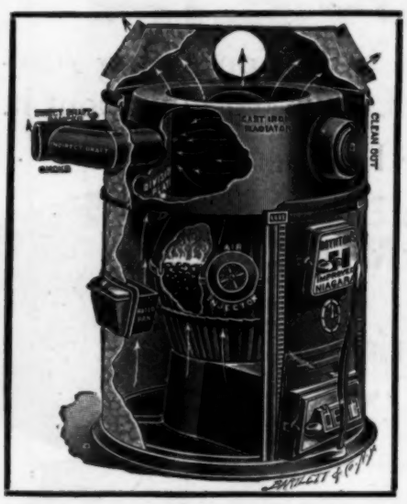
**Hot Air Furnaces**

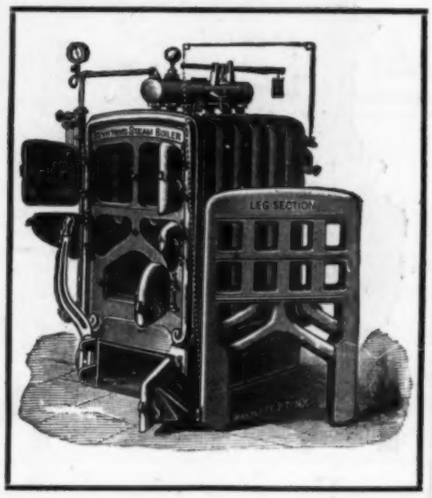
**Steam and Hot Water Heaters**

and the largest stock and varieties to select from, send for **THE BOYNTON FURNACE CO'S.** CATALOGUE, which is complete. There may be others, but the genuine

**BOYNTON HEATERS**

are sure to be right.

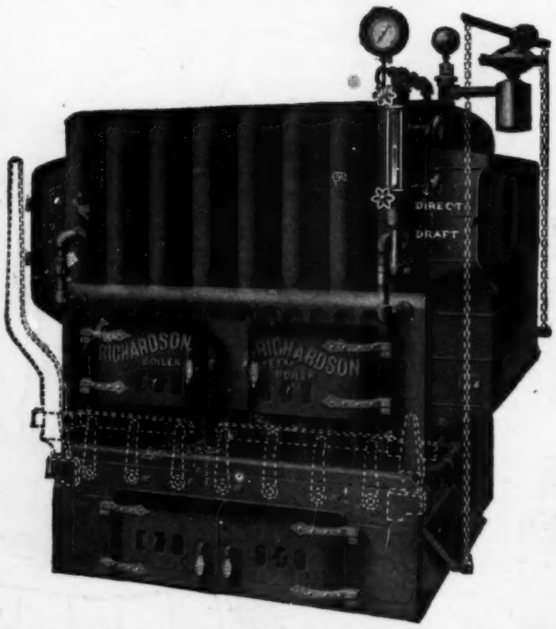



**The BOYNTON FURNACE CO.**

**147-149 Lake St., CHICAGO** **207-209 Water St., NEW YORK**

# RICHARDSON STEAM and WATER BOILERS

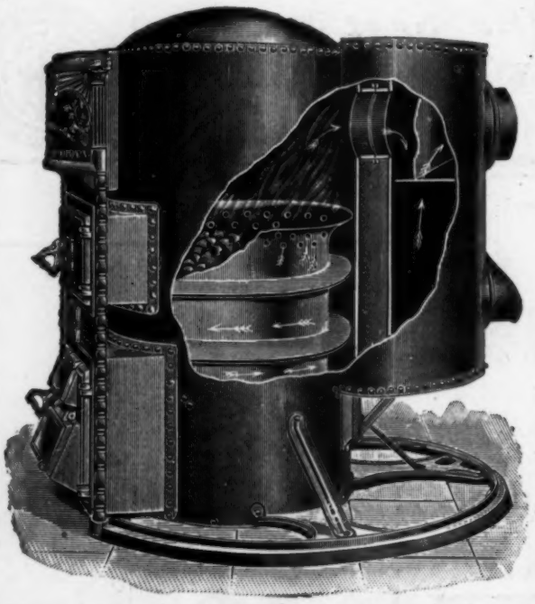



92 Per Cent.
Direct Fire Surface

Deep Return Flue near Exit. **Most Powerful, Effective** and **Economical** Boilers ever made.

RATED FOR FROM { 2,400 to 4,900 Sq. ft. Steam. 3,800 to 7,800 Sq. ft. Hot Water.

**RICHARDSON & BOYNTON CO.,**
**CHICAGO. BOSTON. NEW YORK.**



# SAY!!.

Do you know there is money handling the all steel

# WEIR

Gas and Soot Consuming *Furnace?* Let us tell you about it.

Made by The
**MEYER FURNACE CO., Peoria, Ill.**

# HANDY

Furnace pipe is the safest made, easiest to put up and cheapest made.

**F. MEYER & BRO. CO., Peoria, Ill.**

We have a
**SURPRISE**
in **NATURAL GAS HEATERS**

DON'T BUY UNTIL YOU SEE THE INDEPENDENT LINE
WRITE US

**Independent Register Company**
CLEVELAND, OHIO

**THE CHAPPELL** COMBINATION ALL CAST IRON LOW DOWN WARM AIR FURNACE

The principle of radiation in The Chappell is positively correct.

The smoke makes a circuit of 22 feet before passing into the smoke pipe.

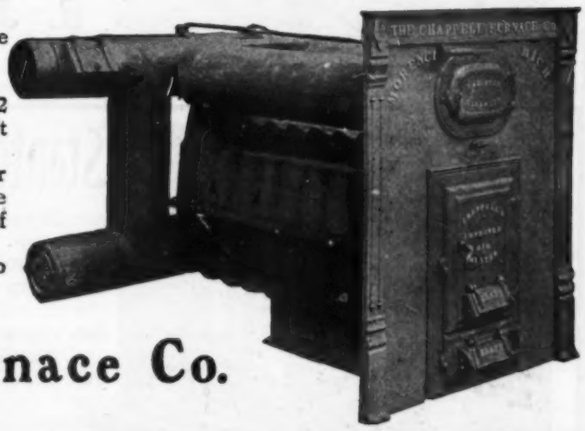
The Chappell has only eight joints.

The accompanying cut illustrates our No. 2 and 12 series, for burning long wood or soft coal.

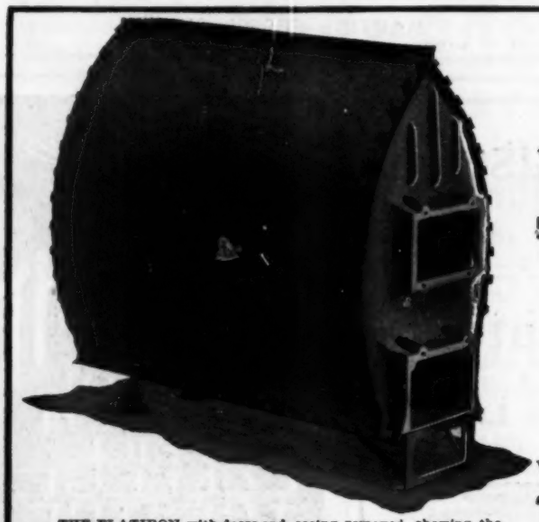
Our No. 20 and 22 series are 8 inches higher and are provided with a heavy corrugated fire bowl for burning hard coal, also an extra set of grates.

The Chappell weighs over a ton, but costs no more than many furnaces of half the weight.

Send for catalogue showing rear view.



**The Chappell Furnace Co.**
Morenci, Mich.



THE FLATIRON with doors and casing removed, showing the extended surface and cast iron heads. The heads are fitted into the steel radiating sheets and made absolutely gas and smoke tight by our improved asbestos fiber packed joints.

All Progressive Dealers Should Have

**The Flatiron Warm Air Furnace**

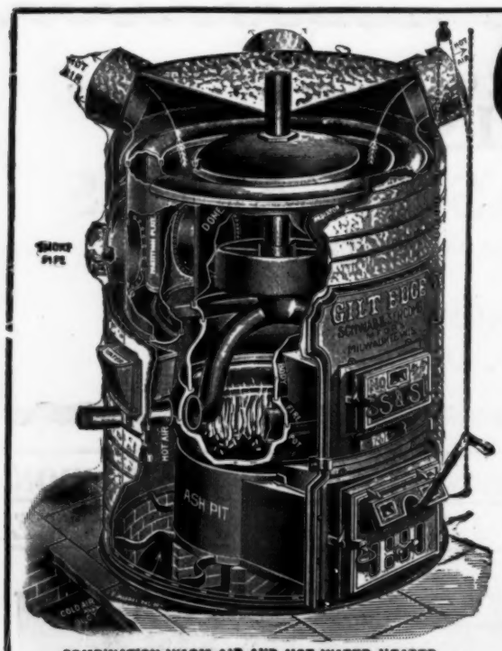
On Their Floor.

The most powerful Air Heater on the market.
Large radiating surface.
Permanent gas and smoke tight joints.
Diving and return flue principle.
Long smoke travel for products of combustion.
Absolutely self cleaning.

WRITE FOR CATALOGUE. Manufactured by

**THE MISKIMEN FURNACE CO.**
LOGANSPORT, INDIANA.

THAT PAPER IS THE CHEAPEST WHICH BRINGS THE BEST RESULTS IN PROPORTION TO ITS RATE, NO MATTER WHAT THAT RATE MAY BE.




COMBINATION WARM AIR AND HOT WATER HEATER.

# GILT EDGE
## FURNACES

**GILT EDGE** in construction.
**GILT EDGE** in up-to-dateness.
**GILT EDGE** in durability.
**GILT EDGE** in economizing fuel.
**GILT EDGE** in ease of operation.
**GILT EDGE** as money makers for the dealer.

SEND FOR CATALOGUE

**R. J. SCHWAB & SONS CO.**
**MILWAUKEE, WIS.**

HEIGHT OVER ALL 63 INCHES.

# Stanton Seamless Warm Air Furnace

If you want the best, The Stanton will appeal to your judgment.

**Seamless** and proof against leakage of smoke, gas and dust from the firebox to the warm air pipes.

Lined with fire-clay blocks. **Portable** Cased or **Brick Set.** Nothing like it.

Burns soft coal slack. Sells on its merits. It will assist you in building up a profitable business.

WRITE FOR CATALOGUE.

**The Stanton Heater Company**
**MARTINS FERRY, OHIO**

# Hart & Crouse Co.

**UTICA, N. Y.**

## Royal Heaters

**235 Water St., New York.** **79 Lake St., Chicago.**

**Steam, Hot Water, Hot Air Furnaces, Radiators.**

HEAT LIGHT
FOR THE
HOME
STORE
HOTEL
SCHOOL
CHURCH
OFFICE
COLLEGE
THEATRE
FACTORY
VILLAGE
INFORMATION FREE
SEND FOR IT
DETROIT HEATING AND LIGHTING CO.
DETROIT MICH.

# The WISE WARM AIR FURNACE

**Powerful, Durable, Economical, Self-Cleaning, Excellent beyond comparison.**

Send for Catalog and Prices.

**The WISE FURNACE CO., AKRON, OHIO.**

---

The Part that Does the Business.

# SAVE ½ YOUR FUEL

BY USING THE

# ROCHESTER RADIATOR

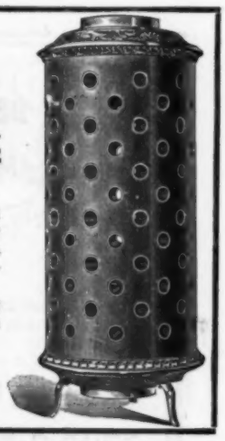
**IT WILL DO IT.**

Take a common sense view of heating, if you wish to heat a poker, you will hold it over the fire, not at the side. We hold 96 to 120 pokers or tubes over the fire, each having hollow air space in center through which a current of air rapidly passes, sending the heat to all parts of the room, getting much greater results than any **drum** or side heater can give.

Inquiries from your town in answer to our advertising in all the leading magazines and family papers are referred to you when you carry our goods in stock. Thus we sell them to you and then sell them for you.

**Over 100,000 of them in use.**

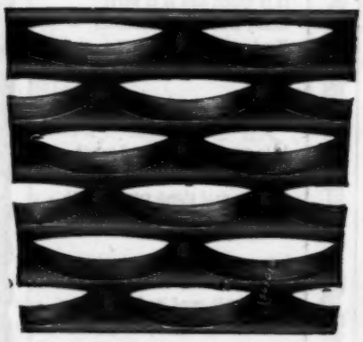
*Write for descriptive catalogue and prices.*



**THE ROCHESTER RADIATOR CO., 120 Furnace St., Rochester, N. Y.**

---

**"Bostwick" Metal Lath**



# ROOFING TIN

Follansbee Bros. Co. brands and N. & G. Taylor's Old Style

# "BOSTWICK"

**METAL LATH**

*Get our prices.*

**STOCKHOFF SUPPLY CO.**

**107 N. 1st St. ST. LOUIS**

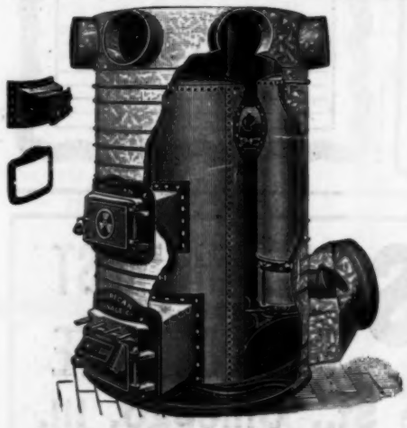
**Furnace Supplies**

TRADE MARK

SCOTT'S IC EXTRA COATED.

REGISTERED

---



Burn Hard or Soft Coal or Coke. Large Doors.

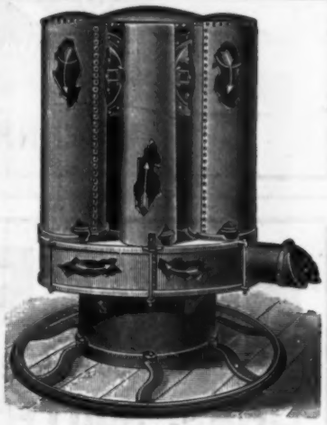
# REASONS

## Why the American Furnace Should Receive First Consideration

It is strictly smoke and gas tight.
It is made of heavy wrought steel and will not crack.
It has more effective heating surface than any furnace made.
Its surfaces are all smooth, and no dust receptacles.
It burns either hard coal, soft coal, coke, wood or natural gas.
It can be managed by the average house help.
Its surfaces are all perpendicular, therefore a powerful heater.
It heats the largest volume of air with a given amount of fuel; thereby furnishes warm air instead of hot air.
It is very powerful, durable and economical.
Its surfaces are all curved, which prevents buckling.
It is very closely riveted, tight like a boiler.
It has a very large feed door, so that large lumps of coal and wood may be used.

**The American Furnace Co.**

**1911-13 Pine Street, ST. LOUIS, MO.**



Large Radiators, Easy to Clean Out.

**Write for prices and secure the agency before the other fellow gets it.**

# JAHANT
## HOT BLAST FURNACES

**Simple, Durable, Economical.**

Adapted for all classes of buildings.

Made with Cast and Steel Radiators.

*Ask for our catalogue.*

**ROHRBACHER & ALLEN, Akron, Ohio.**

Any dealer looking for the best, most attractive, up-to-date and complete line of Ranges in America, should at once secure the sale of the

**HUB**

**SMITH & ANTHONY COMPANY,** 48-54 UNION STREET, BOSTON, MASS.

Manufacturers of Cooking and Heating Apparatus of Every Style and Description.

It will help you just a bit,
When your goods are selling—nit;
'Tis a match that's always lit—
The little ad.

It is always up-to-date;
Dealers find it tempting bait;
And it gets the lowest rate—
The little ad.

It is quick and it is sure;
Heavy trade it will secure;
Hard-earned rest it will assure—
The little ad.

It is small, but sly and tough;
It's a winner with the bluff;
It's the real thing sure enough—
The little ad.

Thousands read its fertile news;
And it's up to them to choose.
Yes, it helps to buy the booze—
The little ad.

STAR STOVES AND RANGES
STAR SHOVEL & RANGE CO. VINCENNES, IND.
GUARANTEED

**VINCENNES, INDIANA**

# HERO FURNACES ARE THE BEST FOR A COLD CLIMATE

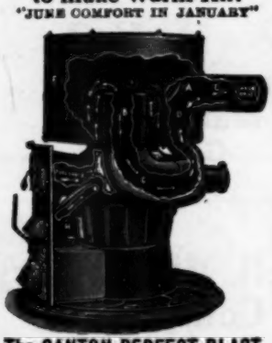
WRITE FOR CATALOG

**CHAS. SMITH CO., : 101 Lake St., Chicago, Ill.**

# 40 SQUARE FEET OF HOT STEEL!

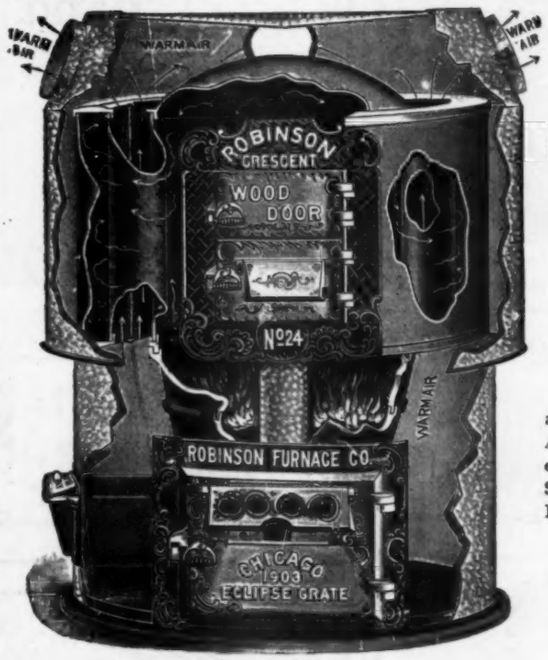
IN THE RADIATOR ALONE OF THE Canton Perfect Blast Furnace to make Warm Air.

"JUNE COMFORT IN JANUARY"



The CANTON PERFECT BLAST.
THE BONNOT COMPANY, Canton, O.

# Robinson Crescent Furnace




Sectional View.

FOR

Hard Coal

Soft Coal

or Wood

A Good Furnace at a Medium Price. A Good Quick Heater for Coal or Wood. Sectional Fire Pots. Double Feed Doors.

WRITE FOR CATALOGUE

ROBINSON FURNACE CO., 105 Lake St. CHICAGO

# Plumbing,

Drainage, Water Supply and Hot Water Fitting.

By John Smeaton, C. E.

CONTENTS:

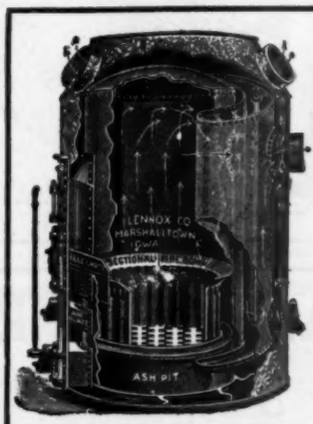
*Chapter 1. Introduction. 2. Drainage. 3. Danger from city wells. 4. External plumbing. 5. Internal plumbing and fitting. 6. Sanitary plumbing. 7. Water services and tapping of mains under pressure. 8. Water supply. 9. Ornamental leadwork. 10. Heating. 11. Hot water work. Index.*

*236 pages, 217 illustrations, 8vo., cloth.*

Price, $3,00.

For Sale By.....

DANIEL STERN,
69 Dearborn St.,
Chicago.




THE TORRID ZONE

A Steel Furnace through and through. Write for catalogue and testimonials.

# THE FURNACE FOR THE DEALER

BECAUSE when sold it never gives any trouble. Riveted like a boiler and gas proof. Simple in operation. Dust does not collect.

BECAUSE customers always urge their neighbors to buy, which helps the dealer.

BECAUSE hundreds testify to it as a fuel saver, and we have their letters to show.

BECAUSE dealers who know us never quit us.

BECAUSE the Torrid Zone Furnace grows with each succeeding year.

BECAUSE it heats a church, school-house or any dwelling.

THE LENNOX FURNACE CO.
MARSHALLTOWN, IOWA.

FARWELL, OZMUN, KIRK & CO., St. Paul, Minn. Northwestern Distributers.

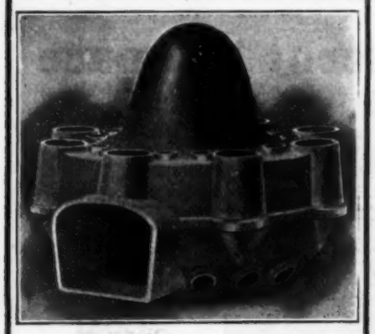
# MONCRIEF

WARM AIR FURNACE.

Specialties:
- All Cast Iron.
- Moncrief Duplex Grate.
- Large Radiating Surface.
- Double Fire Pot.
- Large Grate Surface.
- Top Return Flue.
- Simplicity, Durability, Economy.
- Cleanliness in Use.

HENRY & SCHEIBLE CO.

6-8-10 Long St. Cleveland, O.



That big generous dome-shaped combustion chamber

makes the "Thatcher" a powerful heater. We could build it straight-sided like most furnaces. We would save cost, but we would lose quality. That dome is evenly heated in every part, and as the air passes up around it, it insures a great volume of well warmed air. That is without the tubes, remember. They add a full third to the Thatcher radiating surface.

Don't you think a furnace made by people who never skimp and who want to give a little bit the best of it to the buyer, might help you to build up your business?

We want to tell you all about our selling plans, too.

A postal will bring our man.

Thatcher Furnace Co.

240 Water St,, New York.

Works: Newark, N. J.

# Are You Going to Get on the Band Wagon?

We *doubled* our register sales last year and from the present outlook will *triple* them this year.

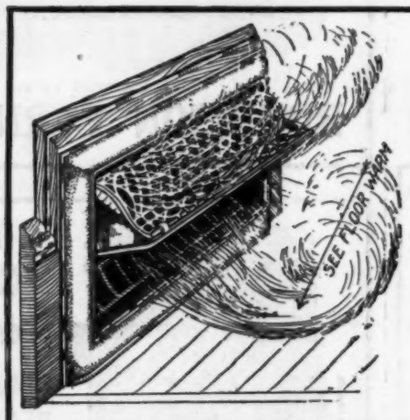
**W H Y ?**

**Because we make good Goods**

SEND FOR CATALOGUE

**Stowell Mfg. & Fdry. Company**

**SOUTH MILWAUKEE, WIS.**




# WARMTH ON THE FLOOR

The only Floor Warm Register manufactured.

**C. H. FOSTER**

**3403 Bell Ave., St. Louis, Mo.**

**MAKER LARGEST LINE OF WALL REGISTERS**

# Auer Wall Register

**or Warm Air Grate, Cast or Steel**

By using the AUER REGISTER one-half the basement pipes can be dispensed with. The necessary volume of air for heating a room on first floor and a room on second floor, instead of being conveyed through a 10-inch and 8-inch basement pipe, is conveyed through a 12-inch pipe connected to a No. 11 AUER REGISTER.

The desired volume of air is turned into first floor room and the capacity of wall pipe into second floor room.

We positively guarantee this system with the AUER REGISTER.

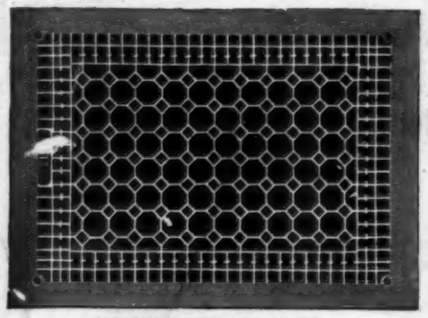
CUSTOMERS prefer them and will pay more for furnaces with the AUER REGISTER.

Cost of installing furnaces is reduced by the saving of piping and labor, giving a better profit to dealers.

**Auer Register & Manufacturing Co.**

**TOLEDO, OHIO**

"REGISTERS OF QUALITY"



MOORISH FLOOR REGISTER.

THE FERROSTEEL COMPANY,

CLEVELAND, OHIO

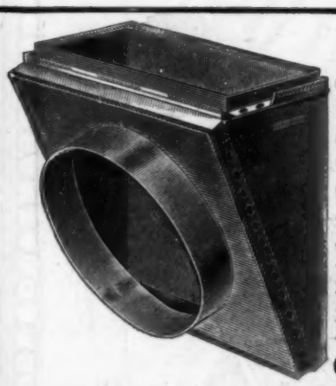
Offer two lines for 1904.

1. *The time tried and reliable line of Ferrosteel goods noted for accurate mechanism and perfect finish.*
2. *Our new Modified Steel Register combining an absolutely rigid top with an invulnerable bottom.*

**Genuine Moorish or Plain Lattice Tops furnished with either line. All our goods are labeled. None others are genuine. Catalogues, prices and Special Circular illustrating our SIDE WALL REGISTERS on application.**

FURNACES, PIPE, ELBOWS AND FITTINGS

CHICAGO FURNACE SUPPLY COMPANY, - - - CHICAGO.



**We Make a Complete Line**

of Boots, Stack Heads and Fittings, both Double and Single, for Tuttle & Bailey, Ferrosteel and Hart & Cooley Special Side Wall Registers, and will be glad to mail printed matter and quote prices thereon, as well as on Hard and Soft Coal Furnaces, Furnace Pipe, Registers, Nested Stove Pipe, Stove Pipe Elbows and Furnace Supplies.

**Our Goods and Prices are Right.**

THE EXCELSIOR STEEL FURNACE CO., 38 W. Monroe St., Chicago

FLORAL CITY HOT WATER BOILERS, STEAM BOILERS

are leaders. We have a full line of round and sectional water and steam boilers.

*Write us for catalogue.*

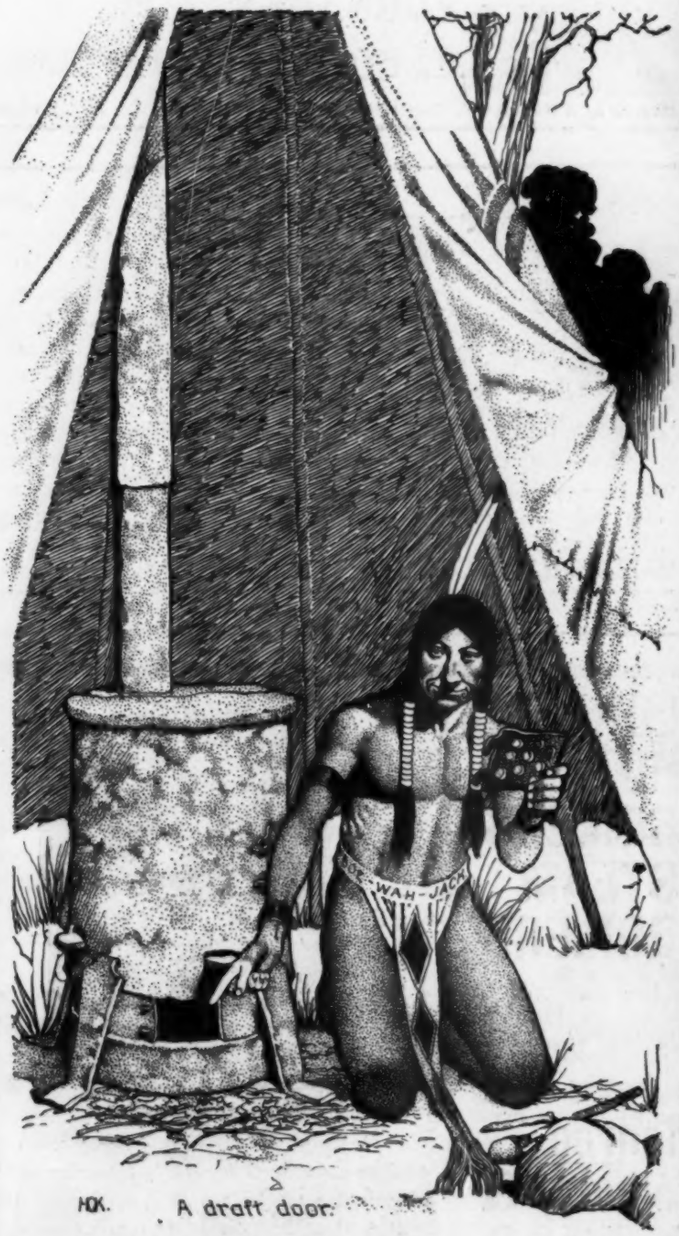
Monroe Foundry & Furnace Co.

MONROE, MICH.

# ROUND OAK
## Standard of America

### *Economy of Fuel*

**How often it is claimed
for a furnace
and how seldom
it is backed up
by the careful, painstaking
fitting necessary to
make an air-tight bottom
that will hold the fire.
The ash pit of the
Round Oak Furnace
is cast in one piece.
The ash-pit door
and draft door are
ground and fitted
onto the frame perfectly.
No leakage of air is possible.
The fire can be held
at any stage desired
without using check draft.
The Round Oak is
the best made and
fitted furnace
in the world.
It saves the fuel,
and can be depended on
first, last and
all the time.
If you wish to
handle a furnace of
quality—
we make it.**




HOK. A draft door.

**Estate of**

**P. D. BECKWITH**

***Fred E. Lee, Manager***

**Dowagiac Mich.**

***MAKERS OF GOOD GOODS ONLY***

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES, THEIR POSSESSIONS AND CANADA, (Invariably in advance). ONE YEAR, POSTAGE PAID, $2.00.
IN FOREIGN COUNTRIES EXCEPT CANADA, ONE YEAR, POSTAGE PAID, $4.00.

Address all Letters, communications and remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,
69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.
THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, JULY 2, 1904.

We acknowledge the receipt of Vol. 1, No. 1, of the Wisconsin Jobber and Retailer, Milwaukee, Wis. This is an interesting and well printed paper of 28 pages, which should have an interesting and successful future.

A NUMBER of Washington business men are complaining about high insurance rates. It is claimed that the rates in Washington are about twice as high as they are in the middle western states and nearly three times as high as they are in the eastern states.

These coast dealers are not entitled to much sympathy. Surely risks on Washington hardware stores are not twice what they are in Illinois. All these victims of the insurance trust have to do is to organize mutuals based on the plan in vogue in the central western states. If they do this we confidently predict they will be awakened some night by a dull thud caused by a sudden dropping of heavy insurance rates.

EXPORTS of manufactures in the fiscal year which ends to-day will be the largest in the history of our foreign commerce. A statement just issued by the Department of Commerce and Labor through its Bureau of Statistics shows that the total exports of manufactures for the eleven months ending with May, 1904, were $410,536,478, and as this sum is 17 million dollars in excess of the eleven months' figures for the year 1900, when manufactures made their high-water mark in exportations, it seems perfectly safe to estimate that the total for the full year will be the largest in the history of our foreign commerce.

Comparing the exportations of manufactures for the eleven months for which figures are now available with those of the corresponding months of earlier years, it may be said that the total exports of manufactures in the eleven months ending with May, 1904, are practically twice as great as those for the corresponding months of 1896, two and a half times as great as in 1892, practically three times as great as in 1890, and more than three times as great as in 1888.

CAPTAINS of industry are coming to employ college graduates in preference to men rising from the ranks, according to a statement made by President Angell of the University of Michigan recently. The university office is becoming a regular employment business for business men. College workers are wanted because they are systematically trained. "Business men have concluded," said President Angell, "disciplined mind and character, though at first their possessor may be ignorant and awkward in details, are in the long run the most valuable attainments in any pursuit. Merchants have decided that they will endure temporary awkwardness for the sake of securing employes whose minds are capable of rising to all emergencies. The difference between the educated and uneducated mind is that an educated mind is disciplined to obey the will, so that it is ready at all times to do the task in hand. If a man attend a dozen colleges and does not learn this he is not educated, and if he never attends college, but learns this, he is educated. He who does not possess this ability in the competition of life will go to the bottom beyond all question."

HEAT is a form of molecular motion and is produced in various ways such as friction. An easy way to secure heat is to liberate the stored heat of the carboniferous age when coarse vegetation cumbered the earth and the dinosaur, perodactyl and ichthosauraus cumbered the earth with their forms. This heat stored up in the bowels of the earth is an amorphous carbon.

Carbon occurs in three forms, crystalline, semi-crystalline and amorphous.

The diamond is a good example of crystalline carbon and graphite of semi-crystalline. Coal unlike its chemical sisters comes in irregularly shaped molecules.

Coal, the form of carbon whose properties are of practical interest to all stove dealers is roughly classed as hard coal and soft coal. In spite of the difference in appearance, in brittleness, in amount of smoke given off per ton of fuel; in character of stove or furnace required for successfully burning same, there is after all but one difference in the chemical composition of Wilkesbarre, Pa., anthracite and Morris, Ill., slack and that is in the percentage of hydro-carbon gas in each. Soft coal contains a very heavy percentage of this volatile gas, which is nothing more or less than hydrogen gas impregnated with carbon. This gas closely resembles the illuminating gas furnished by the average gas company.

PRICES of the principal articles of domestic consumption or for use in domestic manufacture show a decline in May, 1904, as compared with May, 1903, except those of farm production and a few of foreign production imported for use in manufacturing. The Department of Commerce and Labor presents through

its Bureau of Statistics each month a series of price quotations on some seventy-five leading articles and grades of articles.

A comparison of the prices named in these tables for the last week of May, 1904, with the first week of May, 1903, shows an advance in prices of wheat, corn, oats, cotton, wool, native steers, cows, and certain grades of hides; also in coffee, india rubber, petroleum, both crude and refined; sugar, both raw and refined; lead, and silver. The above named are all the articles which schow an advance.

The articles which show no change are jute, and steel rails.

Articles which show a decline are family beef, mess pork, lard, tallow, oleo stearin, rice, tea, pig iron, both Bessemer and southern foundry, iron bars, steel bars, steel billets, tin plates, coke, raw silk, mohair, manila hemp, sisal hemp, hides of certain grades, leather of all grades, copper, tin, and spelter.

Practically all the farm products in their natural state show an advance, including cattle, though beef, pork, and lard show a decline.

---

T. SCHMID, a Roseland, Ill., druggist, delivered a very able address on "Drugs, Doses and Antidotes" before a recent meeting of the Retail Merchants' Association of Illinois, from which we make the following excerpts:

The druggist of to-day has to resort to energetic advertising methods to be progressive. The old system of sitting behind your prescription counter waiting for business is past. The modern merchant who never advertises escapes a lot of trouble, he gets rid of the trouble of preparing advertisements, and of course, has no worry about changing them and keeping them fresh and up-to-date. He can truthfully say that it is no trouble to show goods for he is seldom asked to show any, but his greatest saving of trouble is in not having to sell goods to the people who stay away, but who would come to his store if he advertised. He never has the trouble of paying a large staff of assistants. Finally, he never has the trouble of enlarging his store and it is very little trouble to count his money. The man who is after business cannot afford to escape this trouble. Why do you advertise? Because you want to keep your name before the public, because you feel that you must show your goods, because you want to make an impression upon the reader.

How to advertise and what is a question I believe that every business man must solve himself. Newspaper advertising may be good in smaller towns, while in large cities the ordinary dealer could not afford to pay the price, and would find dodgers, booklets and novelties a better medium. Care should also be taken in wording advertisements, not to make the intent misleading, as in the following, which was displayed in a Chicago meat market: "Pickled pigs' feet, our own put up."

The following pill advertisement clipped from a foreign journal should certainly produce results: "If you want a really pure, unsophisticated 'family pill,' buy Bolus' liver-encouraging, kidney-persuading, silent perambulator—twenty-seven in a box. This pill is as mild as a pet lamb and as searching as a small tooth comb. It don't go fooling about, but attends to the case it tackles, and is as certain as an alarm clock." Everybody has heard, and everybody has laughed at the story of the old farmer who, driven nearly to desperation by the swarms of potato bugs which threatened to bring him to ruin, sent a dollar to an advertiser for a sure means of killing them, and received in due time two small blocks of wood with the injunction to put the bug on one and bring the other down on it with a bang.

As the result of our last year's convention at Alton, I thought I would try a new method of advertising in the form of some novelty for the children, and so as not to be bothered with them all hours of the day, confine the time for distribution to a certain afternoon.

I wasn't in St. Louis ten minutes after leaving Alton when my eye caught the very thing. It was a winner. The Louisiana Purchase drum. The principal idea of the novelty was to make a noise. I at once ordered 1,000 with my advertisement to be printed on same. I made a window display of them and with it a prominent card stating, "these drums will be given to our little friends Friday afternoon from 4 to 6." This attracted considerable attention. Well, the Friday came on schedule time and it happened to be raining, and so did the children come. The rain only aided their enthusiasm. There were at least 2,000 howling youngsters trying to get into my store, which at its best could not accommodate over 200. My store was packed, coming in both front and rear door entrance, and the street blocked with children. My neighbors thought there was a riot on my corner. It was only after using force that two of my clerks got out into the street with the souvenirs and then it only took a short time to dispose of the drums. It certainly was an advertisement that I will never forget. My store looked as if a cyclone had struck it. Business was at a standstill. I made a vow then never to advertise a novelty again to be given away at a certain hour. I find, however, that children are an excellent medium for circulating advertising matter. I know they are often a nuisance, so are other things connected with business. We are after results and when you land on a method that pays, stick to it.

---

## RANDOM SKETCHES.

BY SIDNEY ARNOLD.

I NOTE the recent incorporation at Atco, N. J., of the Philadelphia Yellow Trading Stamp Co., capitalized at $125,000. If there is a continuance of this mushroom growth of trading stamp concerns giving out maroon, robins egg blue, chocolate, buff and other colors of trading stamps, the victims of this craze who are unfortunate enough to be color blind will find themselves in sad predicaments as to the proper book in which to place these offspring of unwise mercantile competition.

* * *

I FIND the following editorial in a recent issue of the Dry Goods Economist, a trade paper issued for dry goods dealers:

"It appears from the New York Herald that the postmaster at Plainfield, Ill., who has four rural delivery routes under his charge, is making remarkably easy the purchase of supplies in the Chicago stores. A dweller along any of the routes calls up the Plainfield postoffice on the telephone and asks that a money order for a stated amount be sent him. The letter carrier delivers the order, collecting the amount, plus the usual fee. On his return to the postoffice the carrier mails the letter containing the order and within two days delivers the package of merchandise. In this way the consumer saves the time and trouble of going to the local stores, and the sale which should have gone to the nearby merchant is switched off to Chicago. That the local storekeeper has just ground to complain of this form of enterprise we do not believe. The postmoster is in business, like every one else. He has just as much right to send a money order when called upon by telephone to do so as he has to supply it when the purchaser appears at the window. The only remedy in the hands of the local retailer is to furnish better service than the Chicago department store. He has the same postal facilities and some special advantages due to location. He could, for instance, make more prompt delivery. Why should not the country resident call up the storekeeper in Plainfield and give him the order, instead of incurring the trouble and delay

involved in sending it to Chicago? Is not the loss of this business by the local merchant attributable, to some extent at least, to lack of advertising and other energetic measures?"

This dry goods paper "does not believe that the local storekeeper has just ground to complain of this form of enterprise."

Well, I do. I think he should complain and complain energetically against action of a government official prejudicial to his commercial interests.

Is a postmaster justified in doing all he can to send money out of town and in helping to tear down rather than upbuild the community in which he lives?

Take another aspect of this question? Suppose Ed. Stubley of the Stubley Hardware Co. called up this postmaster on the telephone and asked the postmaster to send him over 50c worth of two-cent stamps. Would Stubley get them or would he get a grilling for his nerve that would give him locomotor ataxia?

Again, why this activity in behalf of out-of-town money orders? An old witch will not vatiocinate until her palms have been crossed with silver, and some people do not act very strenuously in behalf of certain interests until they reach a "crossing."

I do not believe it is the place of a postmaster to send over 25 two-cent stamps when Ed. Stubley, the hardware merchant, telephones him that he is shy of stamps.

Neither do I believe it is his place to send a money order to Farmer Sears-sucker when the latter telephones him for one.

If he does one he is logically bound to do the other —but he should do neither.

* * *

THE missionary Huc, on his famous journey to the forbidden city of Lhasa in Tibet, encountered a large tree in the garden of a certain lamasery, every leaf of which bore indelibly impressed the sacred, ineffable name of Buddha. With a praiseworthy zeal for truth, Huc counted those leaves. There were 40,000 of them! Think of the toil this horticultural experiment entailed in order to thus honor Buddha, and at that only those who visited this lamasery could see this unique multiplication of the name of the "Light of Asia."

In this connection I cannot refrain from remarking that if you want the name of your stove or coffee mill indelibly impressed on 40,000 leaves of an Asiatic tree Tibetan priests will probably do it for you for a consideration, provided you give them half a century to do it in, but if you want the name "indelibly impressed" on 40,000 "leaves" where it will do you some good, viz., you can have it done with great rapidity and at small expense by utilizing for a few issues the "leaves" of a certain trade paper.

* * *

I LEARN from the Chattanooga, Tenn., *News* of June 25th that "In the course of the next week or ten days an important meeting in relation to the stove manufacturing industry will be held in this city, when National Inspector Manahan of Chicago will arrive here to inspect the products of the northern and western association for the purpose of fixing prices for the ensuing season."

Do the stove fraternity recognize their esteemed hired man under the appellation, "National Inspector Manahan"?

* * *

AN English hardware dealer recently devised a "jack" window, wherein he showed "jack planes, jack plane handles, coils of jack chain, jack cranes, jack screens, bottle jacks, bottle jack keys, beer jacks, oil jacks, drinking jacks, jack pumps, carriage jacks, engine and motor jacks, copper fish jacks, Jack Frost, roller jacks, and many other jacks from a pan of jack hobs to the game Jack's alive."

* * *

A CERTAIN stove salesman once invited a prospective purchaser to visit the plant of his concern and see what an extensive molding floor and modernized equipment they had.

"No," said the prospective purchaser, "I don't care anything about seeing your fine equipment, but what I do want to see is some fine stoves that you have turned out."

Good cupolas, patterns and high-grade pig do not necessarily make fine stoves, any more than fine feathers make fine spring broilers. The man who orders fried chicken does not care anything about the color of the bird's tail feathers or whether the breed is Plymouth Rock or Leghorn. His interest lies solely in the white meat lying around the breast bone and its age, freshness and method of preparation. In like manner the purchaser of stoves who makes his living by retailing them is interested more in the appearance and construction of the stove, than in the methods by which it is produced.

For this reason it is apparent that good work is the stove manufacturer's best card. Almost any dealer can tell the difference between good and poor stoves, and all the claims that a stove salesman can make about superior facilities and long experience will prove of little weight if the cook or heater in which these claims are embodied is finished in a sloppy, unattractive manner, and is prodigal in the use of fuel and does not operate well.

"Aim high," advises the successful business man; but like the boy with his first gun, we often overshoot the mark and get nothing. Many a manufacturer relying on his ability and superior equipment, entirely overlooks the size of the ash pan, and the tastefulness of the nickel ornamentation which send the dealer to the arms of a rival manufacturer.

* * *

WHILE at St. Louis Exposition Secretary T. J. Fernley of the National Hardware Association was induced to consult the celebrated native pathologist connected with the Philippine village. Although all the confreres, retailers and jobbers of hardware, were present none will divulge result of consultation. It is assumed the Philippine method of reducing avoirdupois, recommended the secretary-treasurer, is not dangerous, as none present came away with a serious air.

# News Siftings

It is said that a large stove plant will shortly be located at La Crosse, Wis.

The Tula Iron Co. are a new Augusta, Me., concern, capitalized at $3,000,000.

It is said that Col. Geo. H. Holliday is erecting a stove foundry at St. Mary's, Tenn.

Wm. H. Talman, treasurer of the Somerset Stove Foundry, Somerset, Mass., died from heart failure, on June 13th.

Jacob Wilson of the Wilson Stove Co., Easton, Pa., died on June 18th of apoplexy; he was in the 62d year of his age.

Frederick N. Rock, Albert P. Crocker, and Henry O. Lane are the incorporators of the Groft Iron Works Co., Boston, Mass., capitalized at $50,000.

Charles A. McCready, O. S. Lee, Jr., and T. S. Buckingham are the incorporators of the Consolidated Metal Polish Co., New York, capitalized at $30,000.

The Star Shovel & Range Co., Vincennes, Ind., are gratified with their present volume of orders for steel ranges and are very optimistic over the outlook.

The Scott National Radiator Stove Co. are a new Marion, Ind., concern who will manufacture a radiating stove invented by Rev. Elwood Scott of that city.

The Independent Register Co., Cleveland, O., have a surprise for the trade in the shape of a line of natural gas heaters possessing unusual points of excellence. They urge the trade to write them for data concerning the Independent line.

John Kontny, 65-67 N. Desplaines St., Chicago, favors us with a very handsome aluminized ash tray with scalloped edges and the trade mark of the Red Cross stoves and ranges in the center.

The Wormnest Stove & Range Co., manufacturers' agents and jobbers of stoves, ranges and furnaces, Grand Rapids, Mich., have been forced by the rapid increase in their business the past year to make an important addition to their present facilities in the shape of a new $6,000 warehouse; which will be constructed of hollow cement blocks, and will be 60x100 feet in dimensions. Its location will be the corner of Oakland avenue and the G. R. & I. and P. M. R. R. tracks, which will give them exceptional shipping facilities. This building will be entirely devoted to the storage of stoves, ranges and furnaces.

B. J. Taylor of the Toledo Stove & Range Co., Toledo, was a recent caller at THE AMERICAN ARTISAN office. Mr. Taylor is enjoying an excellent trade in his popular line of steel ranges. He has just built a new line of steel ranges, embracing many unique features of excellence, which will be aggressively pushed the coming season.

The Galusha Stove Co., Rochester, N. Y., have recently made a very important purchase, as they have secured the patterns, shop rights and patents of the Cortland Howe ventilator stoves, which are well known to the stove trade, and have had a decided vogue for over a decade on account of their many valuable qualities. This firm have made many improvements to this famous heater, and solicit a continuance of the valuable trade which it has enjoyed.

Because he pasted advertising slips on United States half dollars, D. T. Phelan of Harvard, Ill., has been arrested and brought to Chicago. He is a brother of the mayor of Harvard, and admitted he affixed to the coins some slips stating that if the money was brought to his store, he would give its value in clothing. Phalen has been released on bond.

## THE CANTON CLOTHES DRYER.

The Canton Clothes Dryer & Mfg. Co., Canton, O., make a very complete line of clothes dryers, one of which is shown herewith.

Their line includes anything from a five-rack dryer for residences to a twenty-rack insulated for institutes, heated by hot air, hot water, steam or gas.

They claim a great many very good features for their product. It is very economical, as the same heat used in drying the clothes boils the water and heats the irons, consequently only five cents' worth of fuel is required for an ordinary washing.

The system used keeps the air constantly circulating through the dryer, which ventilates the articles in the process of drying.

The dryer consists of a drying cabinet and a laundry stove. The cabinet is manufactured of galvanized iron, with a reinforced wrought iron frame, and is very strong, rigid and durable.

Canton Clothes Dryer.

The sides are paneled, which gives it a very handsome appearance. The wire screen, hanging rods and guides are of a non-corrosive galvanized metal which will not soil or injure the clothes.

The laundry stove is especially constructed to heat the cabinet, boil water for the clothes and heat the irons. It is fitted with a reversible grate adapted to use hard or soft coal or wood.

The heating and ventilating, combined with the system of controlling employed, renders it impossible to overheat or burn the articles in the process of drying and from experience it has been shown that the clothes are taken from the cabinet as white, clean and pure as if dried by the sun or wind, and as the dryers can be operated at any time under any weather conditions, the many little trials and discouragements incident to wash-day are overcome by its use.

If the stove only is to be used, by opening a damper the heat may be conducted through the stove and chimney without entering the cabinet.

The materials used in the manufacture are very durable, and the design and workmanship are the best.

A handsome illustrated catalogue will be sent to dealers on application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

## STOVES FOR BURNING SOFT COAL.

The successful burning of soft coal is a problem which has taxed the minds of many, and one of the concerns which has met with the most success in constructing stoves for the successful burning of soft coal and lignite is the Marion Stove Co., Marion, Ind.

For a number of years they have placed on the market their Retort and Retort Oak, and it has met with unqualified success. Every year this company has been compelled to enlarge their manufacturing facilities in order to cater to the increased demand for these stoves. One objection to this type of stove heretofore has been that it has not been a thing of beauty, and after a long series of experiments, this enterprising company has produced and are placing on the market this type of stove in as neat and ornamental a dress as one ever beheld.

Their Marion Oak especially being an architectural beauty. This company has now ready for the market thirty-four styles and sizes of their Marion Oak, Retort, Special, and Retort Oak, and while these stoves will retain all the utilitarian virtues for which these stoves have become famous, their dress for the season of 1904 and 1905 is so attractive that this company is expecting a much larger increase in trade.

In their Retort stove the hopper or feed funnel is detached from the magazine proper so that any escaping gas will escape into the stove and not into the room. Another feature is that the cut-off or check draft is in a swing cover, which short circuits the draft in the top.

Another constructional novelty of theirs is that their hot blast ring is outside of the stove so that it cannot burn out.

In their Marion Oak they have a deflector plate which is level with the upper feed door, which prevents any puffing of gas.

These stoves, while the interior construction is round, have four pilasters which give the stove a square effect. They have a massive base with an overhanging foot rail.

This company has a series of beautiful photographs fully illustrating this truly beautiful line of soft coal heaters.

## STOVE PLATE SCRAP.

W. G. Scott read a paper before the recent Indianapolis convention of the American Foundrymen's Association on the subject of "Scrap Iron Specifications," in which he proposed to classify scrap iron as follows:

(1) Light machinery scrap (gray iron).
(2) Heavy machinery scrap (gray iron).
(3) Stove plate scrap (gray iron).
(4) Car wheel and chilled iron (gray iron).
(5) Cast borings.
(6) Malleable iron scrap.
(7) Steel scrap.
(8) Wrought scrap.
(9) Mixed scrap.

Under the sub-head of stove plate scrap he made the following remarks:

### AN EXCELLENT SOFT SCRAP.

New stove plate is considered as an excellent soft scrap on account of the high silicon, graphite, and phosphorus content. Old stove plate, containing burnt iron and an unlimited amount of rust, is objectionable, and many foundrymen will not use it at all. Old stoves and furnace castings which have been in use for years are generally pretty well "burnt" and consequently are high in sulphur and low in graphite. New stove plate is scarce and high in price, while old stove plate is cheap; therefore very little of the former article is found in the scrap now on the market. No specifications calling for new stove plate scrap would be effective, as it is almost impossible to get such a grade. The only specification that we know of makes no such distinction, but deals with the ordinary mixed scrap in the following manner:

### SPECIFICATIONS FOR STOVE PLATE SCRAP.

The scrap purchased under this specification is assumed to be a soft cast iron consisting mostly of broken parts of stoves and furnace castings. An admixture of light machinery scrap is permissible, but parts of stoves from the fire box are objectionable, also pieces which are badly warped or burnt. On receipt of a shipment or load of stove plate scrap the material will be sorted and the "objectionable" material laid aside. The purchaser retains the right to reject such material, or to accept it at a reduced price, providing it may be made into grate bars, sash weight, etc. It is distinctly understood that this latter clause be optional with the purchasing agent. It will be seen from the above specification that there is a serious objection to burnt iron, yet there is a desire to keep such poor material providing the price is right, and we are inclined to think that all of the burnt iron is not made into sash weight. Taking the average run of stove plate scrap, including a small amount of fire box parts and other objectionable pieces, the material will generally analyze within the following limits:

| | | | | |
|---|---|---|---|---|
| Silicon | 2.30 | to | 3.30 | per cent. |
| Sulphur | .075 | to | .135 | per cent. |
| Phosphorus | .45 | to | 1.25 | per cent. |
| Manganese | .20 | to | .70 | per cent. |
| Total carbon | 3.50 | to | 4.50 | per cent. |

### DIFFERENCE IN COMPOSITION OF NEW AND OLD SHOE PLATE SCRAP.

There is a wide variation in the above, but it must be remembered that there is a vast difference in the composition of new and old stove plate scrap; furthermore that one founder believes in high phosphorus and silicon, whereas another might think the desired fluidity could be obtained with a high carbon and silicon; both, however, adhere to the high silicon idea. High phosphoric iron is easily fusible, while high graphite iron is the reverse, consequently the latter mixture is now favored. The following analysis of new stove plate and the same material after two years' usage illustrates the difference in composition:

| | New Material. | Old Material. | |
|---|---|---|---|
| Silicon | 2.60 | 2.52 | per cent. |
| Sulphur | .089 | .117 | per cent. |
| Phosphorus | .720 | .731 | per cent. |
| Manganese | .30 | .21 | per cent. |
| Combined carbon | .20 | .42 | per cent. |
| Graphite carbon | 4.00 | 3.56 | per cent. |

The piece in question was said to be part of the fire box and the claim is made that the great increase in sulphur was due to the absorption of sulphur from the coal; evidently, it must have been a poor grade of soft coal.

## ENGLISH ADVERTISEMENTS.

An English paper, the Church Times, publishes the following advertisement:

Wanted—For country house—lady gardener, two lady house parlor maids; also lady working housekeeper; very good needle women and experienced in illness; state full particulars, social position, references and salaries; all found except ale; inclose photographs; lady cook also kept. Address, etc.

# Catalogue House Competition.

We take pleasure in presenting herewith an additional batch of interesting letters we have received from various branches of the trade, commenting on the question of catalogue house competition. The different angles of vision show that there is need of greater unison in the ranks of legitimate merchandising—a consummation that is felicitously nearer with each succeeding month.

A CASE OF SURVIVAL OF THE FITTEST.

Fred J. Cook, Fowlerville, Mich., writes: "The only hesitancy I have about expressing my views is that I do not like to give the catalogue houses any more cheap advertising. I think they have had plenty of this from the trade generally already.

There has been a great deal of talk and various views expressed on the subject of catalogue house competition and, naturally, like men, some have been good while others bad or indifferent. I would like to feel more positive of my remedy before I prescribe. I have read some able articles on this subject written by good business men of experience and I think well of their views as expressed and published in THE AMERICAN ARTISAN and other publications. I would refer particularly to the remedies as suggested in the paper read before the Southern Hardware Jobbers' Association at Atlanta by Mr. Simmons of the Simmons Hardware Co., St. Louis, Mo. I think the manufacturer, as quoted in the article, page 27, issue of June 11th in THE AMERICAN ARTISAN, decidedly overrates the value of catalogue house trade to him as compared with that of legitimate trade.

I am very sure, even with the inroads the catalogue houses have been making into trade as distributors of merchandise to the consumers of same in this country in recent years that they do not at this time at the best market over 10 per cent of the merchandise consumed, and, in my opinion, this is more than they are entitled to because I believe that the system of merchandising is unfair and will work out no benefit to any person or persons except themselves. Granting that the catalogue houses now market 10 per cent this leaves still 90 per cent of the business of this country in the hands of the jobbers and retailers and that amount of merchandise that may be sold by the manufacturers direct to the retailers and, in a few instances only, so to speak, to the consumer. The jobber should be just as much interested in holding down or doing away, if possible with the catalogue house as the retailer, for as surely as the retailer loses the control of trade, the jobber will suffer proportionately.

It is my intention and I am now bringing my business up to the system of short credits as there is nothing that has always held the retailers of this country down from every point of view in trade as the old slow coach of long credit. If the manufacturers, jobbers and retailers will only stand by each other and all do business practically upon a cash basis, the retailer making his most liberal terms 60 days' credit to people worthy of it and using every effort to get all the cash trade possible, the catalogue house competition or any other competition will not worry them or prevent their receiving a just reward for the capital and labor invested in the business which everyone is entitled to.

In this matter, as in all others, it is going to be a survival of the fittest. I am going along in the retail hardware trade doing my best under existing conditions and am willing to do my part to improve them. If it proves that the people want to buy their goods through catalogue houses, I see no other way only to get after the trade in the same manner. The retailers and jobbers can never succeed in squelching the catalogue houses without the united and determined support of the manufacturers. Without this the retailers might as well give up. While if the maker, jobber and the natural distributer, the retailer, take a firm stand against them, there can be no other result than the success of the established or so-called legitimate trade, but, as before stated, it is a case of the survival of the fittest. The side that is the best organized and puts up the best fight is going to win out and, at this time, I would not want to stake too much on the outcome."

JOBBERS INSIST ON A CERTAIN STANDARD QUALITY.

A prominent Texas hardware dealer writes: I think the manufacturer you quote occupies the same position of the man who drinks to excess and tries to satisfy his conscience for thus doing by claiming he has become so addicted to the habit that he finds it impossible to resist.

This manufacturer at heart is not interested in the jobber, and hits him some hard licks as a justification of his going to the catalogue house for business. In the first place, what kind of men run catalogue houses that they of all others should be the only people who do not "bicker, demand rebates or kick about broken packages?"

This very shot of his carries with it an impression of goods without merit, or a charge that is not true. I say goods without merit, for the reason that it is a known fact that catalogue houses do not handle the very best classes of goods, take them as a whole. They handle lots of good goods, but worlds of inferior stuff.

Any man with ordinary business intelligence knows that the jobbers as a whole are as honest as the catalogue or any other class of business men. If he kicks and complains, nine times in ten it is for a good and sufficient reason. I can not believe the catalogue house would fail to make his kicks and complaints if the cause was the same.

My notion is, the goods demanded by jobbers as a whole must reach a standard for quality that the catalogue house would not demand, and in this way, the gentleman could justify his love for the catalogue house. Meritorious goods go with the retail dealer, and the jobber is brought so closely in touch with the consumer by reason of his trade with the retailer, he must of necessity handle goods that will bear the closest scrutiny. Retailers if you please, are brought face to face with the consumer, and must handle goods of real merit.

Catalogue houses can sell goods of a slightly inferior quality and do all right, simply because the consumer has paid his money and rather than have a big lot of correspondence with almost a sure thing of being outdone in the end, accepts it and there the matter drops.

If his goods are not as claimed by the retailer, he knows his remedy and does not hesitate to demand it. The jobber learns of these things and must look out for such complaints. The manufacturer making such goods has to account for their shortcomings, the result is, if the goods are without merit, the jobber is guilty "of bickering, kicking, etc."

The talk about the terms and pay is all rot, for if he does not collect his bills promptly, the fault is his own. With banks galore, he has nothing to do but draw for all bills not met promptly at maturity.

My notion the credit and paying qualities of the average jobber will compare favorably with the average manufacturer.

I feel sure the manufacturer quoted "over-rates the value of catalogue house trade, while under-rating that of legitimate trade," and I also feel sure if you will investigate this matter closely, the fault is either with the manufacturer, or his goods.

I do not happen to have the papers read by Messrs. Simmons, Norvell and Bogardus, and if I have read them, I have forgotten it. For this reason, I can not answer this part of your letter.

I think "a law killing fake advertising" would have a

wholesome effect, not only against catalogue houses, but against all kinds of fake methods of getting business. Just how such a law could be drawn to cover the case in my opinion would be the sticker.

I believe as did Mr. Barnum, "the American people want to be humbugged," and as long as this is the case, it is hard to get at this matter of fake advertising. Our farmers are never so happy as when they think they are getting a "regular snap." I will modify this by saying a great many of our farmers are this way. A great many do not cater to these fake methods, but prefer to deal with their home dealers on whom they can rely for the quality of their goods.

I agree with a good part of the "Indiana retailer," but do not take the position quite so strong. I think the jobber and retailer should both "stand by their guns" in making the fight. I fully endorse what he says "by adopting modern methods, preaching quality rather than price, "but do not go very far with him where he says "preaching local patriotism," for patriotism is a poor thing to argue business on.

A man buying goods wants results. Give him good goods, goods that will give him all he expected, convince him it is to his interest to buy only goods of real merit, and let the price go to the dogs.

Whenever a man comes to me with his catalogue quotations, I say to him, bring me your catalogue, show me the character of goods offered, figure the freights and I will duplicate the price, if not save him money, the only condition being that he pays me cash just as he does the catalogue house.

My experience is the manufacturer with goods of known merit is not "tearing his shirt" to sell the catalogue house. On the contray, those manufacturers who do the greater part of this business have lines that will not meet the demands of the trade, with whom the jobber does business.

When you change the nature of our American citizens you will stand a show to kill catalogue houses. Until then, the manufacturer of meritorious lines, jobber and retailer must stand together. There are plenty of manufacturers whose trade does not know the catalogue house.

EVIL WILL BE MODIFIED.

H. G. Cormick, Centralia, Ill., writes: "I was greatly interested in the letters on the question of catalogue house competition which appeared in your issue of June 11th. I think the manufacturer whose remarks were reproduced was especially favored in his business and believe that the conditions he mentioned are not general.

The different remedies suggested at the Atlanta convention of the Southern Hardware Jobbers' Association will help conditions if put into practice, though I am of the opinion that the time for destroying the evil has passed. I have always favored the passage of a law against fake advertising, although I do not think it will kill the competition of catalogue houses.

In regard to this being a jobber's fight, would state that I certainly think it is the jobber who is vitally interested as a certain proportion of the retailers can live off of the pick-ups in their respective communities, while the jobber must have a large volume of business on which to exist. It is but the natural result of an ill advised policy on the part of the jobber, which built up the catalogue house in its infancy. To be frank, I have no sovereign remedies for catalogue house competition, but the many suggestions offered, the agitation now in progress and the education of the dealer in modern methods will produce a practice which will modify the evil."

GOODS SOLD TO CATALOGUE HOUSES LOSE IDENTITY.

T. J. Lindley, Jeffersonville, Ind., writes: "I believe there is only one successful and congenial channel for the distribution of hardware, that is, from the manufacturer to jobber, retail dealer and consumer.

If the manufacturer adopts the plan of selling direct to the retail dealer, he finds it very expensive, for he usually has only one line of goods to offer and his sales to any one dealer are not large. If he sells the retail dealer a large bill he overstocks his customer, and he becomes dissatisfied with the house.

To sell his output or a large part of it, to a catalogue house or any one concern, means that his goods soon lose their identity and value to the public, for the simple reason that his goods and their special features are lost sight of.

If the manufacturer sells the catalogue house, the catalogue house naturally sells the consumer at a very small margin, therefore the retail dealer sees no profit on this line of goods being sold, and he consequently disposes of the goods he now has on hand, and the jobber soon finds orders for the above line of goods very limited, therefore the jobber and retail dealer drop this line, as they find it unprofitable.

The manufacturer now finds that he has only one channel to dispose of his goods, that is the catalogue house.

The retail hardware people do not as a rule favor boycott, at the same time do not favor selling goods, unless they make reasonable profits.

I am of the opinion that the small manufacturers, making a special line, would find it very profitable for a few years to sell their entire output to the catalogue house, as their cost of selling would be reduced to the minimum.

There are many standard lines of hardware at the present that the retail hardware dealers are considering. Is it best to handle them or take up a line of goods they feel would be better protected and therefore realize larger profits?

A solution for the above is for the National Hardware Association to decide what lines they can handle at a profit and let the National Retail Hardware Dealers' Association adopt the same plan, and on this basis you will find new goods will be introduced, which, by continuous advertising and talking, will prove a benefit to both jobber and dealer.

I have read the addresses of the hardware dealers at the Southern Hardware Jobbers' Association and candidly believe they do not realize the inroad the catalogue houses are making in their trade.

The jobbers are the heaviest losers, for their loss is general, coming through many avenues and channels and winding up with one large volume, while the retailers have a small expense with a large and varied stock, branching out in all directions with opportunity to make a large showing. I firmly believe the jobber has more at stake than the retail dealer.

As to the Missouri law killing fake advertisements, this is commendable, but who is sending out fake advertisements?

You must grant equal rights to all and special privileges to none.

The parcels post law I consider *would be a rape on the general trade* of our great and grand country, and it should not be countenanced and considered by our senators and congressmen. It should be condemned by every good citizen.

To handle all the mail and freight would demand depots of immense proportions, covering acres to take care of it, reducing the civilian to the minimum and the government employes to the maximum.

While in one respect it would benefit the farmer, it would completely destroy their local markets, drawing everything to one center, and their loss would be greater than their gain."

JOBBER AND RETAILER HAVE EQUAL RESPONSIBILITY.

A leading Arkansas retailer writes: "I think the article by the manufacturer on catalogue house competition in your June 11th issue, was considerably overdrawn. The talks of Messrs. Simmons, Norvell and Bogardus were good and to the point, and if they will help to carry them through and the rest of the jobbers and the manufacturers will do their part with the retailer to help we will prevail. I am glad that some of them have come to the conclusion they have. I believe that a good strong law well enforced as to fake advertising would cut off the business of some firms that do not regard the truth when it comes to writing an ad for anything that they have for sale.

I do not think that the jobber has any more at stake than the retailer, but he has an equal share of the responsibility with the retailer.

ARE NOT TROUBLED BY CATALOGUE HOUSES.

A firm of Michigan hardware dealers write us: "We have not been troubled with catalogue house competition."

# The Hardware Record.

**American Hardware Mnfs. Assn.**
Pres., J. C. Birge, St. Louis, Mo.
Vice - Pres., F. S. Kretsinger, Cleveland, Ohio; Harry B. Lupton, Pittsburgh, Pa.; Geo. W. Corbin, New Britain, Conn.
Secy.-Treas., F. D. Mitchell, Phila.
Ex. Com., C. W. Asbury, Philadelphia, Pa.; Chairman; Robert Garland, Pittsburgh, Pa.; N. A. Gladding, Indianapolis, Ind.; Geo P. Hart, New Britain, Conn.; Wm. M. Pratt, Greenfield, Mass., W. S. McKinney, Allegheny, Pa.; E. G. Buckwell, Cleveland, Ohio; E. B. Pike, Pike Station, N. H.

**Arkansas Retail Hdw. Dealers' Assn**
Pres., Hamp Williams, Hot Springs.
1st. V. P., T. B. Stewart, Newport.
2d V. P., R. P. Graham, Fordyce.
Sec.-Treas., C. E. Taylor, Little Rock.
Ex. Com., J. E. Maxey, Ozark; J. A. Plummer, Marianna; R. P. Allen, Van Buren; J. L. Davis, Magnolia, one year each; Frank B. Gregg, Little Rock; C. T. Rosenthal, Batesville; J. M. Pittman, Prescott, two years each.

**Chicago Retail Hdw. Dealers' Assn.**
Pres., H. E. Gnadt.
V.-P., G. A. Neeb.
Sec., G. R. Lott.
Collector, John Hora.
Treas. J. L. Smith.

**Hardware Merchants' and Manufacturers' Assn. of Philadelphia.**
Pres., Thomas Devlin.
V.-P., John R. Griffith.
S.-Treas., T. James Fernley.
Directors, W. W. Supplee, John R. Griffith, E. S. Jackson, W. C. Peters, S. Disston, E. Fisher, J. H. Ritter, T. Devlin, T. J. Fernley.

**Indiana Retail Hdw. Dealers' Assn.**
Pres., E. M. Bush, Evansville.
1st. V.-P., A. Shidler, So. Bend.
2d V.-P., T. J. Lindley, Jeffersonv'l
Sec.-Treas., M. L. Corey, Argos.
Members Ex. Com., W. P. Lewis, New Albany; Chas. E. Hall, Indianapolis; J. L. Fulton, Portland.

**Illinois Retail Hdw. Dealers' Assn.**
Pres., Charles H. Williams, Streator.
V.-P., W. T. Gormley, Chicago.
Sec., L. Nish, Elgin.
Treas., Geo. A. Englehardt, Chicago.
Ex. Com., Charles H. Williams, Streator; W. T. Gormley, Chicago, L. Nish, Elgin; Geo. A. Engelhardt, Chicago; Frank McKinney, Rockford; Chas. Johnson, Peoria; L. D. Ray, Belvidere; F. F. Porter, Chicago; Wm. Bittel, Peoria; H. G. Cormick, Centralia.

**Indian Territory Retail Hdw. Assn.**
Pres., A. L. Severance, Durant.
1st V.-P., Geo. W. Mowbray, Tulsa
2nd V.-P., W. J. Pettee, Oklahoma City.
Secy., W. G. Johnston, Oklahoma City.

**Iowa Retail Hdw. Dealers' Assn.**
Pres., S. R. Miles, Mason City.
V.-P., H. S. Vincent, Ft. Dodge.
Sec.-Treas., A. R. Sa e, Mason City.
Members Ex. Com., T. A. Nichols, Burlington; D. A. Stauffer, Iowa City; W. B. Baumgardner, Dubuque; U. S. Johnson, Tama; F. W. Ritter, Hedrick; Thomas Gadd, Des Moines; F. F. Botlinger, Afton; Chas. Swaine, Council Bluffs; Wm. H. Millard, Cherokee.

**Kansas Hardware Dealers' Assn.**
Pres., Oscar Roehr, Topeka.
V.-P., E. J. King, Logan.
Sec.-Treas., J. A. Cole, Topeka.
Ex. Com., F. W. Bartlett, Kansas City; T. H. Kinlry, Beloit; J. M. Walters, Robinson; J. H. Hamilton, Arkansas City; T. J. O'Neill, Osage City.

**Kentucky Retail Hardware and Stove Dealers' Association.**
Pres., J. C. Frederick, Owenboro.
1st V.-P., J. C. Mahon, Lawrenceburg.
Sec., John R. Sower, Frankfort.
Treas., J. Steitler, Owensboro.

**Michigan Hardware Association.**
Pres., John Popp, Saginaw.
V.-Pres., F. M. Brockett, Battle Creek.
Treas., Henry C. Weber, Detroit.
Sec., A. J. Scott, Marine City.
Ex-Com., W. P. Culver, Portland; K. S. Judson, Grand Rapids; J. H. Whitney, Merrill; E. J. Morgan, Cadillac; T. Frank Ireland, Belding; Fred S. Cook, Fowlerville; C. E. Pipp, Otsego; A. Harshaw, Delray; A. J. Scott, Marine City.

**Minnesota Retail Hardware Assn.**
Pres., A. T. Stebbins, Rochester.
V.-P., George Evenson, St. Peter.
Sec., M. S. Matthews, Minneapolis.
Treas., Geo. F. Duerre, Plain View.
Ex-Com., W. H. Tomlinson, Le Sueur; J. H. Smith, Minneapolis; H. R. Schroeder, St. Paul; J. A. Roehl, Owatonna; W. T. Cowing, Alexandria; C. H. Casey, Jordan; Louis Gewalt, Breckenridge; Chas. F. Ladner, St. Cloud; J. F. McGuire, St. Paul; A. T. Stebbins, Rochester; Geo. M. Evenson, St. Peter.

**Missouri Retail Stove and Hardware Dealers' Association.**
Pres., Tayler Frier, Louisiana.
V.-P., E. L. Wachter, St. Louis.
Sec., F. N. Neudorff, St. Joseph.
Ex. Com., J. W. Poland, Carrollton; F. N. Kannsteiner, St. Louis; W. T. Shoop, Richmond.

**National Hardware Association.**
Pres., S. A. Bigelow, Boston.
1st V.-P., John C. Koch, Milwaukee.
2nd V.-P., Brace Hayden, San Francisco.
Ex. Com., F. Barker, Elmira, N. Y.; J. D. Moore, Birmingham, Ala.; John Freeman, Detroit; P. E. Strouss, Boston; R. M. Dudley, Nashville; W. S. Wright, Omaha.
Advisory Board, W. W. Supplee, Philadelphia; H. H. Bishop, Cleveland; John Bindley, Pittsburg; R. A. Kirk, St. Paul.

**Nebraska Retail Hdw. Dealers' Asn.**
Pres. J. C. Cornell, Ord.
Vice-Pres., F. D. Kees, Beatrice.
2d V.-P., Max Uhlig, Holdrege.
Sec.-Treas., H. J. Hall, Lincoln.

**National Retail Hdw. Dealers' Asn.**
Pres. W. P. Bogardus, Mt. Vernon, O.
V.-P., W. H. Tomlinson, LeSueur, Minn.
2d V.-P., F. C. Moys, Boulder, Col.
Sec., M. L. Corey, Argos, Ind.
Treas., A. T. Stebbins, Rochester, Minn.
Ex. Com., T. Frank Ireland, Belding, Mich.; James N. Kline, Williamsport, Pa.; Frank F. Porter, Chicago; S. E. Jones, Richmond, Ind.; A. H. Abbe, New Britain, Conn.

**N. Dakota Retail Hdw. Dealers' Asn.**
Pres., H. F. Emery, Fargo.
1st V.-P., G. W. Wolbert, Bismarck.
2d V.-P., A. C. McNiven, Langdon.
Sec., C. N. Barnes, Gand Forks.
Treas., H. T. Helgesen, Milton.
Ex. Com., E. E. Elliott, Sanborn; H. F. Strehlow, Casselton; Hurbert Harrington, Fargo.

**Ohio Hardware Association.**
Pres., John F. Baker, Dayton.
V.-P., C. S. Johnson, Barberton.
Cor. Sec., Frank A. Bare, Mansfield.
Fin. Sec., W. C. Jones, Columbus.
Treas., L. F. Stahler, Waverly.
Ex. Com., John C. Fuhr, Williamsburg; John Kramer, Dayton, C. W. Jewell, Utica; W. A. Perry, Zanesville; Frank W. Ingalls, Byran.

**Pennsylvania Retail Hdw. Assn.**
Pres., Geo. L. Moore Brownsville.
V.-P., Geo. J. Rudolph, Pittsburg.
Sec., J. E. Digby, McKees Rocks.
Treas., B. A. Maggine, Braddock.
Ex. Com., E. E. Lyon, Greensburg; C. N. Savage, California; B. A. Maggine, Braddock; C. O. Shroyer, Dawson.

**St. Louis Stove Dealers' Assn.**
Pres., R. H. Myers.
1st V.-P., E. L. Wachter.
2d V.-P., G. M. Rinie.
Sec., Louis Boehl.
Treas., F. A. Kannsteiner.

**Southern Hardware Jobbers' Assn.**
Pres., W. M. Crumley, Atlanta, Ga.
1st V.-P., John Donnan, Richmond, Va.
2d V.-P., E. A. Peden, Houston, Texas.
Ex. Com., Bruce Keener, Knoxville, Tenn.; Chas. Ireland, Greensboro, N. C.; O. B. Barker, Lynchburg, Va.

**Texas Retail Hdw. and Imp. Assn.**
Pres., S. L. Erwin, Honey Grove.
1st V.-P., W. M. Gunnell, Marlin.
2d V.-P., J. D. Carroll, Quanah.
Sec. & Treas., J. W. McManus, Waxahachie.

**Wisconsin Hdw. Dealers' Assn.**
Pres., H. L. McNamara, Janesville.
V.-P., Ralph Burtis, Oshkosh.
Sec.-Treas., C. A., Peck, Berlin.
Ex. Com., W. H. Busse, Milwaukee; F. R. Ramm, New London; H. S. Scofield, Sturgeon Bay; R. Murdoch, Beloit.

**THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 42 to 46 inclusive.**

J. A. Walker will start the manufacture of hardware specialties at Rockford, Ill.

Gahm & Doermann are a new Streator, Ill., concern who will manufacture hardware specialties.

G. E. Blockie & Co. are a new hardware, tinning, plumbing and heating concern at Idaho Falls, Idaho.

J. M. Denning, Cedar Rapids, Ia., will shortly erect a wire nail mill and fence factory constructed of brick.

The Red Jacket Mfg. Co., Davenport, Ia., pump manufacturers, are erecting a foundry, 85x200 feet, in dimensions.

John Duff, a Roswell, New Mex., hardware dealer, was visited by fire recently. His loss is $2,000, with $250 insurance.

Fayette Rogers, a Homer, Mich., hardware dealer, was married on June 22d last to Miss Bessie Atwell of Muskegon, Mich.

W. T. Green has purchased the interest of J. L. Caldwell in the hardware firm of Green & Caldwell at Chattanooga, Tenn.

John Tiebout, president of W. & J. Tiebout, New York, died at Manasquan, N. J., June 26th, of heart failure. He was 77 years of age.

P. E. Strauss of Fitz, Dana & Co., Boston, Mass., wholesale hardware and metal merchants, is at present enjoying an extended vacation.

The Emerson Mfg. Co. are a new Wilmington, Del., concern, who will manufacture gasolene lamps and stoves. They are capitalized at $250,000.

William J. Adam, Folger Adam and Robert A. Cameron are the incorporators of the Adam Steel & Wire Works, Chicago, capitalized at $50,000.

The trade will regret to learn of the sudden death of C. G. McCord, Reading, Pa., secretary of the Pennsylvania Wholesale Hardware Dealers' Association.

Wm. B. Jansen, Milo B. Lowell and Leonard Lowell are the incorporators of the Jansen-Lowell Co., Hicksville, Wis., capitalized at $10,000 to do a general hardware business.

The American Window Glass Co., Pittsburgh, has advanced the pay of the cutters and flatteners 26 per cent, and has also given a guarantee of $15 a week market money.

R. M. Clark is president, M. B. Freshman is vice-president and A. M. Clark is secretary and treasurer of the Western Knife Co., Kansas City, Mo., capitalized at $20,000.

Gus. Taliaferro, V. K. Taliaferro, W. J. Petee and Geo. A. Hunter are the incorporators of the Oklahoma Safe & Lock Co., Oklahoma City, Okla. Ty., capitalized at $600,000.

Jacob H. Nellis, Andrew A. Kaeffer, Hugo J. Seibert and Matthew B. Conell are the incorporators of

the Favorite Pan & Utensil Co., Paterson, N. J., capitalized at $25,000.

L. D. Saxton, F. B. Langan, and John T. Langan are the incorporators of the Fiber Cushion Horseshoe Co., New York, capitalized at $30,000, for the manufacture of horse shoes.

L. M. Bessette, F. W. Gardner and J. H. Burwell are the incorporators of the Bessette-Burwell Hardware Co., Saratoga Springs, N. Y., capitalized at $10,000, for dealing in hardware.

Walter B. Horn, R. Irvin and Henry E. Tobin are the incorporators of the Maxwell-Briscoe Motor Co., North Tarrytown, N. Y., capitalized at $750,000, for the manufacture of gasolene engines.

Chas. M. Rhodes, Hugh P. McGowan, Mortimer S. Gillett, Robert I. Scott and E. De Witt Erskine are the incorporators of the Rhodes Manufacturing Co., Steubenville, Ohio., capitalized at $500,000.

The Allen-Randall Co., Springfield, Mass., are a new concern capitalized at $15,000. They are incorporated for the manufacture, purchase and sale of hardware, and will also sell sea moss and sea grass.

Thos. J. Brown, Jas. M. Rogers and Wm. C. Carter are the incorporators of the Brown Rogers Co., Winston-Salem, N. C., capitalized at $100,000. This firm will continue the hardware business of Brown, Rogers & Co.

The trade will learn with regret of the recent death of the mother of M. S. Matthews, secretary of the Minnesota Retail Hardware Dealers' Mutual Fire Insurance Co., which took place at her home in Massachusetts. Mr. Matthews took a trip to the Bay State in order to attend the funeral.

The Standard Mfg. Co., Shelby, O., advise us that they have just started the manufacture of washing machines. Their capital stock is $10,000, $5,000 of which is paid in. Francis Brucker is president and general manager, John A. Bushey is treasurer, and A. L. Stump is secretary. They will make washing machines and other hardware specialties.

The Joseph Dixon Crucible Co., Jersey City, N. J., send us a little booklet giving some observations on the causes of the slipping of leather belting and the conditions which justify the uses of a belt dressing. Paragraphs in this little pamphlet treat of overloaded belts, dirty belts, dried out belts, and slack belts. Various dressings, such as vegetable and animal oils, resin and waterproof dressings are considered. The booklet also has something to say about Dixon's traction belt dressing.

Chas. D. Clark of the Clark, Quien & Morse Co., Peoria, Ill., is enjoying himself at the World's Fair in St. Louis. Mr. Clark, with his wife and family and a party embracing eleven in all, came to St. Louis from Peoria, Ill., on his steam yacht, the Vernon, Jr. They left Peoria at 4 a. m., Monday, and after putting up at Grafton for the night, reached St. Louis at 8 a. m. on Tuesday.

They are making themselves at home on the boat during their sojourn in St. Louis, thus making themselves independent of avaricious landlords.

## CONFERENCE ON CATALOGUE HOUSE QUESTION.

All the past week and up to some date next week in all probability a joint committee representing the National Retail Hardware Dealers' Association, National Hardware Association and Southern Hardware Jobbers' Association have been and will wrestle with the overshadowing topic of catalogue house competition. The place where these recognized leaders in the trade are studying and discussing every phase of this question and the most expeditious and effective remedies therefor is the Hotel Jefferson, St. Louis. Roll call on Monday, June 27th, was answered by the following gentlemen:

W. P. Bogardus, Mt. Vernon, O., National Retail Hardware Dealers' Association.

S. R. Miles, Mason City, Ia., National Retail Hardware Dealers' Association.

M. L. Corey, Argos, Ind., National Retail Hardware Dealers' Association.

E. M. Bush, Evansville, Ind., National Retail Hardware Dealers' Association.

T. Frank Ireland, Belding, Mich., National Retail Hardware Dealers' Association.

Samuel A. Bigelow, Boston, Mass., National Hardware Association.

S. Norvell, St. Louis, Mo., National Hardware Association.

T. James Fernley, Philadelphia, National Hardware Association.

W. S. Wright, Omaha, Neb., National Hardware Association.

R. A. Kirk, St. Paul, Minn., National Hardware Association.

R. M. Dudley, Nashville, Tenn., Southern Hardware Jobbers' Association.

S. Norvell of the Norvell-Shopleigh Hardware Co., St. Louis, officiated as chairman of the meeting, and from the first the sense of the meeting was that the action of the hardware trade in combating this evil should be marked by a concerted aggressiveness.

The best of feeling marked the gathering and harmony was shown all the way through. The jobbers were delighted to have the retailers so willing to fall in with their plans and the retailers were delighted at the way the jobbers were taking hold of the matter. Where a recognition of mutuality of interests is the dominant chord of a conference and aggressive action on the part of any branch of the trade if sound in policy and rightly followed up must redound to the direct and immediate advantage of the entire trade, it is a necessary concomitant that substantial progress must be rapid. However, so vast was the subject considered and so many the ramifications thereof that a vast amount of the drudgery of detail was necessarily left to various sub-committees who took more or less time in formulating plans. T. James Fernley, representing the National Hardware Association; W. P. Bogardus, representing the National Retail Hardware Dealers' Association, and R. M. Dudley, representing the Southern Hardware Jobbers' Association, were appointed as a press committee.

## HOW ONE DEALER MEETS CATALOGUE HOUSE COMPETITION.

An Illinois dealer, while visiting THE AMERICAN ARTISAN office recently, spoke as follows on the question of catalogue house competition. "This question is largely a matter of advertising. The catalogue house gets one or two articles very cheaply and flashes the price in large type giving the impression they sell everything else as cheaply. The way for the dealer to meet this is to look out for bargains and "sass back." To illustrate this point I would state that I just came from Lyon Bros., Market, Madison and Monroe Sts., Chicago, who sell at wholesale to the retail trade only. While there I was attracted by the price they made on Christy pattern bread sets to retailers—a special price, of course, and although I am well stocked up on cutlery I laid in a stock of goods described in their circular as follows:

"Permits housewives to cut hot or cold bread without tearing or jagging the loaf. Blades are made of special refined polished and tempered steel, with self-clamped nickel-plated steel handles, each knife ground with curved razor edge. These knives are expressly made for the purpose and are now commanding attention of all buyers. Each set consists of one bread knife, size of blade 1¼x10 inches; cake knife, size of blade ⅞x8 inches; kitchen knife, ⅝x3½ inches. Each set put up in a neat descriptive box. Dozen sets, $1.10."

Why did I do this when I have all the cutlery on hand I want? Simply because in one of the catalogues issued by the Chicago supply houses appears this announcement:

"Christy pattern knife sets, made of the best cold rolled nickel steel will give satisfaction, handles firmly swaged to the blade and will never come loose; set consists of bread, cake and paring knife; per set of three knives, 24 cents."

I am going to get one of these "24c" catalogue house sets and put them up in my store under this sign:

**SEARS, WARD & CO.**
**Sell this Knife Set for**
**24c plus the freight**

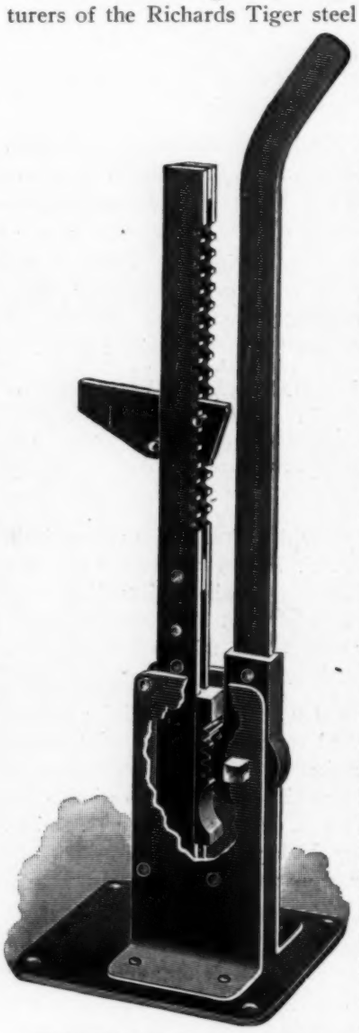
Right next to it I will display my purchase with the sign:

**JOHN JONES**
**Sells this same make of Knife Set for**
**12c and he pays the freight**

"Of course 34c on a $1.10 investment is not a crackerjack profit, but what I am after is a chance to give catalogue house competition a jar and a big one at that. People on seeing these two knife sets side by side will say, 'Why Jones sells Christy knife sets, fine looking sets, for 12c,' and they will go home and look in their catalogue and see that the very *cheapest* Christy knife set advertised in this catalogue, one that the supply men are ashamed to talk about is silently listed at 14c, with freight to be added, and that the only one that shows up alongside of mine is their 24c knife set. While, as I said, my direct profit is only respectable my indirect profit is nice and juicy, as it is a fine come back at the catalogue house people for their braggadochio."

## RICHARDS TIGER STEEL WAGON JACK.

The Richards Mfg. Co., Aurora, Ill., are manufacturers of the Richards Tiger steel wagon jack shown in the accompanying illustration. This jack locks automatically. It is a powerful jack, operated by pinion and lever, and is so constructed, it is claimed, that the greatest possible leverage is obtained. When the load is lifted and the handle is down the jack becomes locked and holds the load in position until the lever is raised. The capacity of this jack is 1,200 pounds. It is packed in dozen lots and weighs 130 lbs. This firm manufacture Richards Palace ball bearing house door hanger, Richards Royal ball bearing trolley house door hanger, Richards parallel tracks, trolley tracks and hangers, especially adapted for movable partitions and continuous doors for freight houses, warehouses, an improved fire door fixture for closing doors automatically in case of fire, Richards Trump door latch made of malleable iron, reversible for right or left doors, Richards Bull Dog steel door latch for heavy swinging doors, also a line of ball bearing noiseless store ladders.



Richards Tiger Steel Wagon Jack.

## MEETING EASTERN NEW YORK AND VERMONT HARDWARE AND IRON ASSOCIATION.

The Eastern New York and Vermont Hardware and Iron Association held their quarterly meeting at the Edison Hotel, Schenectady, N. Y., on June 23d last. A number of trade matters were discussed and a banquet was held in the evening. Jas. L. Dunn of McCormick & Dunn, Troy, N. Y., is president of the

association and Chas. H. Turner of the Albany Hardware Co., Albany, N. Y., is secretary.

## WORLD'S FAIR EXHIBIT OF THE PETERS CARTRIDGE COMPANY.

The Peters Cartridge Company, Cincinnati, O., extend a cordial invitation to the trade to visit their exhibit at the St. Louis Fair, located in Block 9A of the Manufactures Building, an illustration of which is given herewith. The central feature of the exhibit is a reproduction in miniature of the factories of this concern, faithful in every detail and illuminated both inside and outside of the buildings. There are also two handsome show cases, containing samples, and a large transparency showing a number of remarkable targets made with Peters cartridges. All these different parts of the exhibit are brightly illuminated and combine to make an effect which is altogether different from any other exhibit at the Fair. There is no provision made for shooting, but Peters cartridges are used exclusively in the only public shooting gallery on the grounds by "Hunting in the Ozarks"—on the Pike.

**World's Fair Exhibit of Peters Cartridge Company.**

## STEVENS SHOOTERS SCORE.

A recent favor from the J. Stevens Arms & Tool Co., 245 Broadway, Chicopee Falls, Mass., advises us that at the recent National meet of champion marksmen, known as "The Bundesfest," held at Union Hill, N. J., June 12 to 20, there were more victories recorded by Stevens target rifles than all other makes combined.

Sixty-three per cent of total winnings of first ten men were won by Stevens rifles.

Forty men made scores of 65 to 72 on target of honor, of which 28 used Stevens rifles.

"Top notch" scores were made by: Theodore R. Geisel of Springfield, Mass., who obtained first place on the Standard American target; his score was 49: rifle used, a Stevens-Pope .32/40/200. In the King contest, he recorded a 10-shot score of 27 out of a possible 30 on the point target. Won first place on Ring target, scoring 74.

The winner of first place on the Honor target, Louis Brehm of Pittsburgh, Pa., shot a 32/40 Stevens-Pope rifle. A. Strecker, San Francisco, Cal., obtained second place on target of honor; scoring 70. He was equipped with a 32/40 Pope-Winchester rifle. W. A. Tewes was second in the King contest, making the excellent score of 197. A .33/40/224 Pope-Ballard rifle helped him win the coveted place. Louis P. Ittel secured third place in the King match, shooting a Stevens-Pope rifle .32/40/200.

## PRAISE FROM A CONSERVATIVE MAN.

A. J. Scott, Marine City, Mich., secretary of the Michigan Retail Hardware Dealers' Association, is a man who happily combines enterprise and conservatism. He would be the last man in the world to endorse a concern that he had not thoroughly investigated and did not implicitly believe in.

Mr. Scott made no mistake in writing the following letter of indorsement, as all of us know—pardon this lapse to an unconventional patois—that the festive fly alighteth not on the Minnesota Mutual. This testimonial of Mr. Scott's to this association is as follows:

I have looked into your plan for writing insurance amongst hardware dealers and believe that your company has

a plan which is safe and conservative and should appeal to the hardware men, not only in your state, but all over the country.

Experience has shown that mutual fire insurance on selected risks can be conducted at a saving of 35 to 50 per cent of the rates charged by the old line companies.

I believe that many of the retail hardware men in our own state will be glad to avail themselves of the opportunity to save such a large percentage of their insurance premiums and I hope that you will be able to write a great many policies in Michigan during the coming year.

## SUNSHINE ALUMYNOID WASHER.

The accompanying cuts show the Sunshine Alumynoid washing machine, manufactured by the Quincy Washing Machine Co., Quincy, Ill.

Fig. 1 shows the white porcelain enameled iron

Fig. 1.

dasher, white enameled cover and detached fly wheel, faucet for draining off the water and gasolene burner. Fig. 2 represents the machine ready for use. The

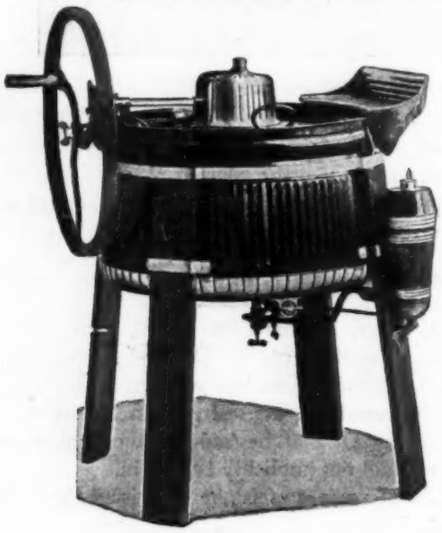


Fig. 2.

body of the washer is made of a special metal styled Alumynoid, which is a happy alloy of aluminum, tin and spelter. This metal is not coated or plated. The bottom of this washer is stamped of one piece of Alumynoid metal. This machine is higher in the center and has rounded edge. It is provided with a drain channel, to which a faucet with 7/8-inch opening is attached for drawing off the water. The dasher or pin wheel is made of one piece of iron and triple coated with white porcelain enamel. The gasolene burner, which is detachable, is, it is claimed, of sufficient capacity to heat 20 gallons of cold water to the boiling point in 20 minutes. It is also made in a form for burning manufactured or natural gas. The special features of this machine are enumerated as follows by this firm: "Greater inside capacity than wooden machines, because the machine is made of metal, saving the space taken up by the thickness of the sides of the wooden washers; the balance wheel is fitted to the body of the machine, and does not have to be lifted when raising the cover; all the gearing is inclosed, eliminating the danger of injury to the operator; a faucet for draining the machine instead of using wooden plugs, and ability to boil the clothes in the machine while it is being operated."

## DEATH OF ANDREW J. PHILLIPS.

The trade will learn with deep regret of the death of Andrew J. Phillips, a manufacturer of window screens and other hardware specialties, which took place on June 14th, after a lingering illness. Mr. Phillips was born at Hartland, Mich., October 9, 1837, and at the age of 20 accepted a position with a manufacturer of wood pumps. In 1862 he removed to Milford, where he engaged in the foundry business, but soon gave this up to resume the manufacture of pumps, which he continued until his removal to Fenton in 1869. He was in partnership with his brother for two years, and they enlarged the business to include the manufacture of well curbs, milk safes and general wood work. In 1879 he invented the bent blade snow shovel, and in 1881 he commenced making an extension window screen invented by Judson B. Phillips. Five years later he formed a co-partnership with his two sons, W. B. and E. A. Phillips, who had taken an active interest in the business for some time. Judson B. Phillips was admitted to the firm in 1890, and the present stock company of A. J. Phillips Company was formed in 1894 with W. B. Phillips as president and manager.

## DEATH OF C. S. MERSICK.

Charles Smith Mersick of C. S. Mersick & Co., New Haven, Conn., died at his residence in that city on June 24th from heart disease. He was in the 63d year of his age. Mr. Mersick was born in New York, December 18, 1840. His first connection with the hardware business was with the old firm of English & Atwater, New Haven. He then went into business with Nelson Hotchkiss, under the firm name of Hotchkiss & Mersick. Later the firm became C. S. Mersick & Co. He was active in public affairs, and from 1899 to 1901 he was state treasurer of Connecticut. He married Ellen Louisa English, a daughter of Geo. D. English, in 1865. Mrs. Mersick died in 1894. He leaves one daughter, Mary E. Mersick.

## AKRON ECLIPSE LEVELS.

The Baker-McMillan Co., Akron, Ohio, send us a little booklet, describing the Akron Eclipse levels. All glasses in Akron Eclipse levels are carried on elastic bearings and enclosed in a heavy glass tube especially made for them. When placed in the wood, they are almost unbreakable. The Eclipse mark by which the position of the bulb is determined with the maximum speed and accuracy is one of the recent improvements in the Akron levels. The levels shown in this little booklet include the No. 2, solid stocks 24 to 30 inches; No. 3, solid stocks tipped, 24 to 30 inches; No. 006, three ply stocks, tipped, 12 to 22 inches; No. 22, three ply double plumbs opposite, made for framing, always right end up, 36 inches only; No. 6, three ply stocks, laminated center, proved glasses, tipped and polished rings at plumb view, 24 to 30 inches; No. 06, three ply, laminated center, polished rings at both views and tipped, hard Cuban mahogany and fine finish, 24 to 30 inches; No. 06, double plumb, same size and finish as No. 06, but with two plumbs working oppositely; No. 4, made of finest mahogany, three ply plush trim, full brass bound, with solid and heavy corners highly polished, 26, 28 and 30 inches; No. 10, full brass bound, machinists' level and plumb, size 1¼ by 2½ inches, 8, 10 and 12 inches long, mahogany, finely finished, set solid, not adjustable; No. 24, mason's level and plumb, solid stocks, arranged for plumb bob 40 inches long; No. 024, same as No. 24, but with two plumbs working same way, 40 inches long; No. 102 level, only 10 to 16 inches long, solid stock; No. 002 level, solid stocks, 12 to 22 inches; No. 16, Akron Eclipse pocket level. One of these catalogues will be sent to the trade on application. When writing for same, kindly add, "Saw it in THE AMERICAN ARTISAN."

## THE SOUTH AND THE CATALOGUE HOUSE QUESTION.

R. M. Dudley, the member of the St. Louis Catalogue House Conference from the Southern Hardware Jobbers' Association, recently sent out the following letter to the members of that association:

As you are, no doubt, aware, I have been selected to serve on a joint committee, representing the Southern Hardware Jobbers' Association, to look after the catalogue house question. This is a joint committee composed of—

One member from the Southern Hardware Jobbers' Association.

Three members from the National Hardware Association.

One member from the American Hardware Manufacturers' Association.

Two members from the National Retail Hardware Dealers' Association.

This committee will meet in St. Louis on the 27th inst. at the Hotel Jefferson, and will, of course, consider this question very fully. I realize the responsibility of the position in which I have been placed, and I would like very much to have some suggestions from the members of the Southern Hardware Jobbers' Association as to what line of policy this committee should pursue.

I dislike to be a member of a committee who does nothing; at the same time it is my desire always to be conservative. I assure you that any suggestions from you will be appreciated, and if you wish it, kept confidential. The Southern hardware jobbers should not treat too lightly this question of catalogue house competition. While none of us have sold these people and have not suffered much from their competition, the inroads which they are now making with us are greater than ever before, and this is undoubtedly the time when we should direct our efforts against them.

## ATLANTA RESOLUTIONS.

The following resolutions were passed at the recent meeting of the Southern Hardware Jobbers' Association at Atlanta, Ga., but are now published in the trade press for the first time:

WHEREAS, We have heard with pleasure and profit the splendid addresses of Mr. S. Norvell and others relative to the subject of catalogue houses and the evils arising therefrom; and,

WHEREAS, This matter has not attained the proportions in our Southern territory that it has in some others, yet, appreciating that matters of such far-reaching influence which affects one portion of the trade should appeal to the craft as a whole; and in addition thereto that these matters may sooner than we think be upon us for vigorous action; and in order that we may carry out the idea and spirit of co-operation and federation which render our efforts more effective in obtaining our wishes from those we desire to impress; therefore, be it

*Resolved*, That we appoint Mr. R. M. Dudley of Nashville, Tenn., as the representative from this association to act in concert with the representatives of other organizations hereafter to be appointed and that he be instructed to act in behalf of this association in conjunction with the others in the contemplated meeting.

*Resolved*, That our thanks are due and are hereby tendered to Mr. W. P. Bogardus, president of the Retail Hardware Dealers' Association of the United States, for his intelligent and timely address before our association.

*Second*, That we hail with pleasure this evidence of growing good will and fellowship as evidenced by this address, and we desire to reciprocate the good will as expressed by Mr. Bogardus, and we trust that the bonds which unite us may grow stronger year by year.

## BUSINESS CHANGES.

### NEW FIRMS.

Jackson, Mo.—The Ford Hardware Co.

Gatesville, Tex.—The Bighorn Hardware & Furniture Co.

Ada, Minn.—Geo. Helland & Co.

Bainbridge, N. Y.—C. W. Ireland Co.

Batesville, Ind.—Meyer Lumber & Hardware Co.

Beloit, O.—The W. P. Bailey Hardware & Engineering Co.

Canon City, Colo.—The J. M. Wright Hardware & Supply Co.

Elkland, Pa.—Fred Gelason.

Greensboro, Ala.—Lane Castleman.

Midland City, Ark.—J. W. Bananza.

Poland, O.—The Poland Hardware Co.

St. Louis, Mo.—The Schoening Hardware Co.

Toledo, O.—Weslay Morris.

Kingston, Pa.—A. J. Roat.

Lisbon, O.—B. S. Young.

### CHANGES.

Iowa City, Ia.—W. S. Thomas succeeds Lichty & Thomas.

Krum, Tex.—Kyle & Faison are succeeded by M. Doorak.

Mahomet, Ill.—J. O. Ralburn succeeds W. H. Holzer.

Moline, Ill.—C. G. Alsene succeeds Anton E. Froyd.

Mt. Vernon, N. Y.—White & Ludlum have dissolved. Mr. White will continue the business in future alone.

Napoleon, O.—Jno. C. Reagan has purchased the Utz hardware stock.

Saratoga, N. Y.—J. H. Barwell succeeds Fred W. Gardner.

Scranton, Pa.—Jones & Lewis are succeeded by the Jones Hardware Co.

### MISCELLANEOUS.

Nerstrand, Minn.—H. C. Held; fire loss.

Ladysmith, Wis.—J. P. Pederson has commenced the erection of a hardware store.

Racine, Wis.—James Murphy; burglarized.

# Heating and Ventilating

Blight & Engel are a new New York City heating concern.

John Roth is a new Mitchell, S. D., steam and hot water fitter.

McAllister & Champion are a new Cortland, N. Y., firm of steam fitters.

C. Chambers is a new York, Pa., heating man, located at 309 South George St., that city.

The Builders' Heating Co., New York City, have moved from 20 W. 31st St. to 54 W. 30th St.

Wm. F. Cozzens, president of the Cozzens Heating & Construction Co., St. Louis, died on June 16th.

Geo. P. McCullum, Muskegon, Mich., has purchased the stock of the Taylor Plumbing & Heating Co.

Ridley & Eaton are succeeded in the steam and hot water business at Brunswick, Me., by the Eaton Hardware Co.

The Philadelphia office of Pierce, Butler & Pierce has been moved from 28 N. Fifth St. to 18 S. Seventh St.

Albert Fentzlaff, Theo. H. Johnson, and Robert E. Moss are the incorporators of the Fentzlaff Heating Co., Montclair, N. J., capitalized at $15,000.

Wm. C. Franz, John J. Thelan and Aug. C. Embeck are the incorporators of the Sun Heater Co., Union, N. J., capitalized at $100,000, for the manufacture of illuminating heaters.

The U. S. Radiator Co., Minneapolis, Minn., are erecting a warehouse and office building at 901-905 Washington avenue South, that city. This will be 66x 165 feet in dimensions, two stories in height.

The Thatcher Furnace Co., 240 Water St., New York, send us a little circular, calling attention to the Thatcher tubular furnace. This circular calls attention to the fact that from the solid cast smoke ring to the ample size ash pit, there is a reason for every Thatcher part. In this furnace, the vertical sided fire pot and anti-clinker grate insure a clean fire. The ashes fall out, but do not stifle the heat because there is no place for them to lodge. Two hundred pins on the pot double the radiating surface.

Ernest E. Mann of the Detroit office of the American Radiator Co., died on June 17th at his residence. 87 Canfield St., East, that city. Mr. Mann was in the 53d year of his age, and before his association with the American Radiator Co. was connected successively with the hardware firm of Limbach & Co., the Detroit Metal & Heating Works, and The Michigan Radiator & Iron Mfg. Co. He leaves a widow and four children.

The Thatcher Furnace Co., 240 Water street, New York send us one of their latest price lists of their Thatcher steam and hot water heaters, radiators and specialties. These include the Thatcher sectional steam heaters and hot water heaters, Comfort steam heaters and hot water heaters, Empire steam heaters and hot water heaters, Rossmore round steam heaters and hot water heaters, Stirling hot water heaters, Thatcher, two column, Thatcher three column, Thatcher five column window steam and hot water radiators, Thatcher steam radiator valves, Thatcher quick opening, male union hot water radiator valves, Thatcher automatic air valves, Thatcher expansion tanks, adjustable floor and ceiling plates, hot water thermometers, etc.

### WEIR FURNACES.

The Meyer Furnace Co., Peoria, Ill., send us their catalogue No. 12, describing the Weir, all steel gas and suit consuming furnace.

It is claimed that the products of combustion in the smaller sizes Weir furnaces travel 36 lineal feet before reaching the smoke outlet, utilizing in this passage approximately 55 square feet of prime radiating surface. The combustion drum in the Weir furnace consists of one sheet of steel, the seams being riveted until they are water and gas tight. The material used is the best quality of low carbon, roll steel plate. The fire pot is so constructed with channels that the air introduced and heated for the purpose of promoting combustion must pass around the entire fire pot a number of times before its discharge, which takes place diffusively, covering the entire fire. This, it is stated, causes combustion to occur from the top down and from the circumference centerward, economizing fuel and giving quick results. The continual circulation of air around the fire pot adds to its durability. The Weir bowl is built on perpendicular lines and is corrugated, allowing an exceptionally large grate surface. This bowl is made in sections and any part can be replaced through the feed door.

The Weir wood furnace is made of very heavy boiler plate steel. Every part is closely riveted; the fire drum in the smaller size is over 4 feet long, so that regular cord wood can be used. The feed door is large, allowing the use of heavy and knotted wood. The radiator is very large. It has perpendicular flues and extends several inches over each side of the fire drum.

The Weir circulating room heater heats by circulation, the cold air being drawn through an opening at the bottom of the casing, and thrown out, heated, through the top.

Brown's rival hot water attachment will heat from one to eight rooms with hot water; they may be from one to two inches apart and may be made on the side bottom or top. One of these catalogues will be furnished the trade on application. When writing for same, kindly add, "Saw it in THE AMERICAN ARTISAN."

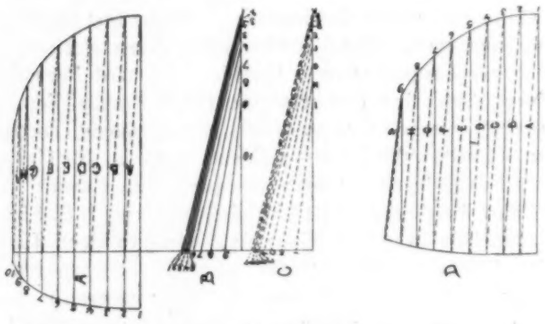
### LANDS YOU AT THE GATE.

All the most important trains of the Wabash Railroad now run into St. Louis by way of World's Fair Grounds, stopping at Wabash World's Fair Station, located at the main entrance. The Wabash is the only line that sells tickets and checks baggage direct to the World's Fair main gate. Excursion tickets on sale daily. Very low rate coach tickets sold twice a week. Write for full particulars, and a copy of folder containing a map of St. Louis and the fair grounds. F. A. Palmer, Asst. Gen. Pass. Agent, 311 Marquette Bldg., Chicago, Ill.

# Tinshop

## SWELL BLOWER PATTERN.

Herewith is pattern for swell blower. The drawing explains itself. While there are short or "jump" rules for this article, they will only apply to a few shapes



of grates and then did not apply very close. This method will apply to any shape, either of grate or opening.

## THE SHEET METAL FOLKS' ISSUE ACATALOGUE.

The Edwards Mfg. Co., Cincinnati, O., send us a handsome catalogue, showing their line of sheet metal building material. Section A of this catalogue shows their eave trough, and conductor pipe, roof and box gutters, elbows and shoes, hangers, cut offs, etc. The Edwards corrugated round expanding conductor, is claimed to be the longest single piece corrugated pipe made. The Edwards plain round ten-foot lock seam pipe is designed for leader or conductor spouts, ventilating, heating blast, hot air and blower pipe. Their corrugated square expanding conductor pipe, is made in galvanized steel in 10-foot lengths, and cold rolled copper in 8-foot lengths. Their conductor pipe hooks and fasteners are made of the best malleable iron and tin.

The Dieckmann flat crimp expanding elbows expand without breaking. The corrugations run parallel, the entire length, and make the curves in unison with the pipe.

The Crary rainwater cut off is automatic, durable, simple and cheap, and is claimed to be the only self-locking automatic cut off on the market.

The Edwards double bead slip joint eaves trough has a bead on both sides of the trough, so that it can be used with either side to the building.

Other goods shown in this section are the Edwards wire eave trough hanger, Howell rain water cut off, roof gutters, combination roof gutters, quarter circle O. G. and box gutters, ornamental galvanized iron ridging, valleys in rolls and sheets, cast iron boots and sewer connections.

Section B is devoted to steel and iron roofing, corrugated iron, imitation brick and weatherboard siding, rock faced stone, etc.

The Edwards roll and cap roofing is made of pure steel; the cap is hooked to the anchor or cleat, which holds it firmly to the standing seam. The metal caps are made in 4 and 8 foot lengths, which are furnished with the square cleats included. Each square is 50 feet long. The covering width is 24 inches.

Other goods shown in this section are pressed standing seam roofing, crimped edge sheets, three crimp sheets, corrugated sheets, corrugated siding, curved corrugated sheets, beaded siding and ceiling, steel weatherboard siding, pressed steel brick, patent rock face brick and stone siding.

Section C is devoted to sheet metal building fronts, galvanized iron cornice, crestings, finials, bay windows, window caps, etc. One of these catalogues will be forwarded the trade on application. When writing for same, kindly add, "Saw it in THE AMERICAN ARTISAN."

## SHEET STEEL WAGE SCALE.

A settlement as to wages to be paid for the year which began on July 1st was practically agreed to by the committee of the Amalgamated Association of Iron, Steel & Tin Workers and the American Sheet & Tin Plate Co. on June 29th last, on the basis of the present scale, which is 18 per cent lower than the original scale. A slight hitch occurred, however, which prevented the signing of the agreement.

## NOTES AND QUERIES.

### VENTILATING FANS.

From Standard Hardware Co., Akron, O.

Where can we obtain ventilating fans?

Ans.—American Blower Co., Detroit, Mich.; Wm. Bayley & Sons Co., Milwaukee, Wis.; Boston Blower Co., Hyde Park, Mass.; Buffalo Forge Co., Buffalo, N. Y.; Champion Blower & Forge Co., Lancaster, Pa.; Howard & Morse, 45 Fulton St., New York; B. F. Perkins & Co., Holyoke, Mass.; B. F. Sturtevant Co., Boston, Mass.; Wilbraham Green Blower Co., Philadelphia, Pa.

### WATER MOTORS.

From Standard Hardware Co., Akron, O.

Where can we buy water motors?

Ans.—Cleveland Faucet Co., Cleveland, O.; Connersville Blower Co., Connersville, Ind.; Jas. Leffel & Co., Springfield, O.; Racine Malleable & Wrought Iron Co., Racine, Wis.; Geo. J. Roberts & Co., Dayton, O.; Ross Valve Co., Troy, N. Y.

### FELT WASHERS.

From S. L. B., Havana, Cuba.

Where can I buy felt washers?

Ans.—Leather & Brass Mfg. Co., Seneca Falls, N. Y.

### THE DAD BARN DOOR CATCH.

From Wm. & F. R. Valentine, Casey, Iowa.

In response to query of Mr. Buchtel, Coin, Ia., in your last issue, would state that the Dad barn door catch is manufactured by the Dad Latch Co. of Manchester, Ia.

### WORKS ON CONCRETE.

From M. G. Combes, Shellsburg, Ia.

Where can I buy works on concrete?

Ans.—Clarke's Architect's Hand Book on Cements, by A. H. Clarke, flexible covers 50 cents, cloth $1.00; Cumming's American Cements, by Uriah Cummings,

price $3.00; Gilmore, Practical Treatise on Limes, Hydraulic Cements and Mortars, by Major Gen. Q. A. Gilmore, price $4.00; A. H. Heath, A Manual of Lime and Cement, price $2.50; Hodgson, Plaster and Plastering Mortar and Cements, by Fred T. Hodgson, price $1.00; Potter, Concrete, by Thos. Potter, price $3.00, are for sale by Daniel Stern, 69 Dearborn St., Chicago.

KLOEBS FLOOR GAS HEATER.

From Reader, St. Louis, Mo.

Who is the manufacturer of the Kloebs Floor Gas Heater?

(Can any of our readers answer this question?—Ed.)

18 GAUGE SHEET IRON FOR NICKEL PLATING.

From Webster, Cook & Co., Mitchell, South Dakota.

Where can we obtain 18 gauge sheet iron or steel polished so as to receive nickel plating?

Ans.—Jos. Ryerson & Son, 18 Milwaukee Ave., Chicago, Ill.

## ITEMS.

The first firm to sign the bar iron scale of the Amalgamated Association is the Sharon Steel Hoop Co., Sharon, Pa.

The Sheet Metal Mfg. Co., Niles, O., manufacturers of corrugated roofing and siding, send us a handsome panel, showing a ballet girl doing a graceful turn.

The residents in the vicinity of Fillmore St. and Homan Ave., Chicago., made a recent protest against the erection of a tin can and stove polish factory in their vicinity.

E. J. Johnson & Co., 38 Park Row Bldg., New York, slate manufacturers, have materially enlarged their grand central quarry in Pennsylvania, practically doubling its output. They have also started a new quarry of sea green slate in Vermont.

The strike of the tinplate workers at the Pontardawe Tinplate Works, Pontardawe, Wales, has been settled by arbitration. The bar cutters have received an advance of a half penny per ton, and the union has been fined $50.00 for breach of contract with their employers.

The W. J. Burton Co., Detroit, Mich., quick shippers of eave trough, conductor pipe, elbows, cornices, skylights, fireproof windows, Paroid ready rock asphalt, and two and three ply prepared roofing, send us some handsome enameled blotters showing a pretty half tone of Viola Allen.

The stockholders of the Atlanta Tin Plate Co. held a meeting at Noblesville, Ind., on June 23d last. The following directors were elected: Cortland Van Camp, H. B. Hibben, J. M. Whisler, D. C. Hobbs, John G. Dunn, James Henderson, John Kemp, John D. Smith and Henderson Coppick. The board also authorized the sale of $125,000 first mortgage 6 per cent bonds on the plant.

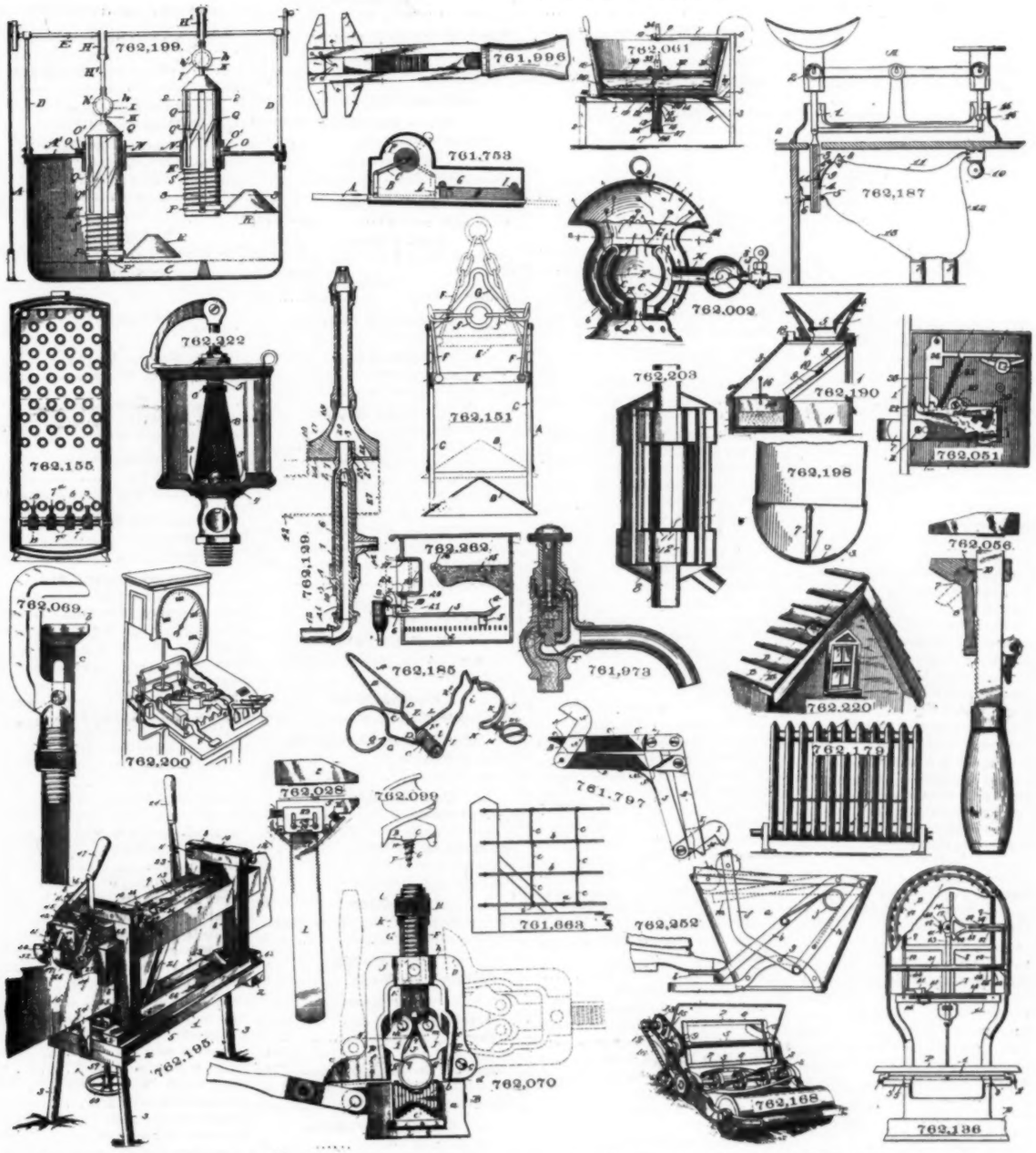
Albert E. Scherer, Glenville, O., has invented a new eave trough hanger, which consists of two parts, one being the roof strap and the other the cross bar and understrap combined. The method of making the cross bar and the understrap minimizes the waste of metal; two blanks are perforated, stamped and cut into shape at each revolution of a press which is kept in continuous operation.

The Amalgamated Sheet Metal Workers' International Alliance held their biennial meeting at Buffalo, N. Y., during the middle of the past month. They will meet next at Washington, D. C., the first Monday of June, 1906. The following officers were elected for the two ensuing years: President, Richard Pattison, New York; first vice-president, Hugh Franey, Scranton, Pa.; second vice-president, John Kennedy, Toronto, Canada; third vice-president, John T. McTigue, Nashville, Tenn.; fourth vice-president, Edward J. Kelley, Baltimore, Md.; fifth vice-president, J. S. Shillabar, San Francisco, Cal.; sixth vice-president, John W. Winfield, Boston, Mass.; general secretary-treasurer, John E. Bray, Kansas City, Mo.; general organizer, Michael O'Sullivan, Pittsburgh, Pa.; delegates to the American Federation of Labor, Patrick Downey of Albany and Dan Heron of Philadelphia.

The Enterprise Enamel Co., Bellaire, O., are making quite a drive on Limonite, their new brown enameled ware, which is so heavily flecked with white as to be almost gray in color. All shapes are made of the best and heaviest steel. Another new ware of theirs is styled the Azurelite. The name liminite is derived from that of the mineral which gives this ware its peculiar brown color. This firm make their own dies and their own shapes from the best open hearth steel, much of their ware being seamless, drawn out of copper cartridges and practically indestructible, as they use the heaviest grades of steel possible.

The American Sheet & Tin Plate Co., Pittsburgh, Pa., send us a handsome show card, showing facsimile of some of the trade-marks of the principal products of that extensive company. These include American Bessemer sheets; American Bessemer refined sheets; W. DeWees Wood Co.'s cleaned refined smooth finish; American Bessemer special sheets; American Open Hearth sheets; W. DeWees Wood Co.'s patent planished iron; Wellsville polished sheets; American Open Hearth refined sheets; American Open Hearth special; American Armature sheets; U. S. electrical sheets; American A charcoal; American AA charcoal bright tin plate; American AAA charcoal bright tin plate; American AAAA charcoal bright tin plate; American AAAAA charcoal bright tin plate; Premier charcoal bright tin plate; American Terne roofing tin; American Extra Terne roofing tin; American Special Terne roofing tin; American Old Style A Terne roofing tin; American Old Style AA Terne roofing tin; American Old Style AAA Terne roofing tin; American Old Style AAAA Terne roofing tin; American Old Style AAAAA Terne roofing tin; American Coke; American Best Coke; American Extra Clean coke; Kream Coke; Kanner Coke; U. S. coke; Taggers coke; American Numethod B Terne; American Numethod D Terne; American Numethod F Terne; U. S. Monongahela Terne; Official Seal Terne; Moonflower Terne; Morton polished steel; black taggers, trunk iron and corrugated sheets.

# NEW PATENTS.




761,753—Lock. Bernardo Borghese, Mondovi-Piazza, Italy.

761,797—Wrench. Frank W. Vogel, Santa Monica, Cal.

761,663—Wire fencing. Fred H. Daniels, Worcester, Mass.

762,252—Mop wringer. Edwin Prescott, Arlington, Mass.

762,195—Saw-swaging machine. William C. Renie, Hoquiam, Wash.

762,199—Washing machine. Adolph A. Rullman and David D. Rullman, Wathena, Kan.

762,198—Kitchen cabinet. Virgil O. Rosser, Dallas, Tex.

762,200—Weighing scale. Willis H. Sargent, St. Johnsbury, Vt.

762,220—Metallic roofing. Jordan Williams, Eckerty, Ind.

762,222—Strainer. Leo Zabel, Grand Forks, Canada.

761,973—Faucet or cock. Hermann Kupsch, Chicago, Ill.

761,996—Wrench. Vital Quenon, Turtlecreek, Pa.

762,002—Hot-air generating gas burner. Edward H. Schwartz, Chicago, Ill.

762,028—Wrench. August Dennis, Pittsburgh, Pa.

762,051—Lock. Henry Hartman, Allegheny, Pa.

762,056—Wrench. Joseph D. Hill, Wilmerding, Pa.

762,061—Washing machine. Martin Jensen, Barnard, Mo.

762,069—Wrench. Clarence C. Longard, Halifax, Canada.

762,070—Vise. Clarence C. Longard, Halifax, Canada.

762,099—Auger bit. Norman Sperry, Seymour, Conn.

762,136—Computing scale. Albert B. Camper, Roanoke, Va.

762,155—Water heater. A. W. Dickerson, Corsica, Ohio.

762,168—Lawn mower. William H. H. Heydrick, Philadelphia, Pa.

762,179—Combined shelf or hanger and foot rest attachment for radiators. Franklin H. Maxam, Princeton, Ind.

762—Weighing scale. C. W. McKee, El Paso, Tex.

762,190—Ash sifter. R. W. O'Donnell, Philadelphia, Pa.

762,151—Bucket. William P. Davis, Durban, Natal.

762,185—Animal trap. L. D. Mouser, Hastings, Nebr.

762,203—Heating drum. Charles J. Segerstrom, Argyle, Minn.

762,262—Liquid-fuel burner. S. Trood, New York, N. Y.

762,129—Vapor burner. Joseph G. Branch, St. Louis, Mo.

## ADVERTISERS' INDEX.

### ALPHABETICAL LIST.


Aitchison, The Robert Perf'd Metal Co.... 62
American Furnace Co.... 15
American Lock Nut Co.... 54
American Radiator Co.... 47
American Stove Repair Wks.... 50
American Sheet & Tin Plate Co.... 53
Ashland Steel Range & Mfg. Co.... 6
Atkins, E. C. & Co.,.... 68
Atlas Bolt & Screw Co.... 1
Atlas Mfg. Co.... 68
Auer Register & Mfg. Co.... 18
Auld & Conger Co.... 55
Avery Stamping Co.... 63
Baker McMillen Co.... 58
Barnett, G. & H. Co.... 1
Beckman Bros.... 64
Beckwith, Estate of P. D.... 20
Benedict & Burnham Brass and Copper Co.... 56
Berger Bros. Co.... 53
Berger Mfg. Co.... 52
Bergstrom Bros. & Co.... 10
Bishop, G. E.... 54
Blacklock Foundry.... 58
Bonnot Co.... 17
Boynton Furnace Co.... 11
Brammer, H. F. Mfg. Co.... 59
Brauer, A. G.... 50
Bridgeport Chain Co.... 1
Bridgeport Crucible Co.... 68
Burton, W. J. Co.... 63
Canton Clothes Dryer & Mfg. Co.... 64
Canton Steel Roofing Co.... 52
Carr & Co.... 58
Century Post Co.... 49
Chappell Furnace Co.... 13
Chicago Furnace Supply Co.... 19
Chicago Stove Wks.... 7
Clark Novelty Co.... 64
Clark, Quien & Morse.... 53
Clayton & Lambert Mfg. Co.... 54
Columbus Bolt Works.... 1
Connors, Wm. Paint Mfg. Co.... 1
Cooney & Geiger.... 48-52
Cope, Geo. W. Pattern Works.... 50
Cortright Metal Roofing Co.... 52
Craig-Reynolds Foundry Co.... 11
Cream City Cornice Co.... 48-53
Cronk & Carrier Mfg. Co.... 62
Crown Ventilator Co.... 48-55
Denning Fence Works.... 64
Detroit Heating & Lighting Co.... 14
Detroit Register Co.... 48
Disston, Henry & Sons.... 65
Dixon, Jos. Crucible Co.... 49
Dust, Wm. T. Co.... 50
Eller, J. H. & Co.... 52
Enterprise Mfg. Co. of Pa.... 65
Enterprise Enamel Co.... 49
Evans Stamping & Plating Co.... 51
Excelsior Steel Furnace Co.... 19
Exhibit & Trading Co.... 1
Ferrosteel Co.... 19
Follansbee Bros. Co.... 52
Foster, C. H.... 18
Foster Stove Co.... 7
Friedley & Voshardt.... 53
Gagan, J. M. & Co.... 59
Galesburg Cornice Works.... 54
Galusha Stove Co.... 6
Garry Iron & Steel Co.... 54
Gem City Stove Co.... 7
Germer Stove Co.... 8
Globe Machine & Stamping Co.... 62
Globe Stove & Range Co.... 48
Globe Ventilator Co.... 68
Great Western Stove Repair Co.... 50
Green Foundry & Furnace Wks.... 19
Hart & Crouse Co.... 14
Hawkeye Wrench Co.... 62
Haynes-Langenberg Mfg. Co.... 10
Henry & Scheible Co.... 17
Hill Dryer Co.... 64
Hoffman, Geo. W.... 57
Hooper, C. N.... 48
Hopson-Haftencamp Co.... 49
Horigan Supply Co.... 60
Howes, S. M. Co.,.... 50
Illinois Roofing & Supply Co.... 68
Independent Register Co.... 13
Iwan Bros.... 56
Johnson, E. J. & Co.... 55
Kanneberg Roofing & Ceiling Co.... 52
Keene, Geo. C. & Co.... 56
Kees, F. D.... 63
Keyless Bank Co., Ltd.... 49
Kimball Bros. Co.... 49
Kinsey Mfg. Co.... 49
Kontny, John.... 11
Lalance & Grosjean Mfg. Co.... 66
Lee-Glass-Andreesen Hdw. Co.... 67
Lennox Furnace Co.... 17
Lufkin Rule Co.... 63
Lyon Bros.... 3
Maher & Son.... 56
Mansfield Stove Pattern Works.... 50
McClure Co.... 68
McFarland, J. M.... 57
Meyer & Bro. Co.... 12
Meyer Furnace Co.... 12
Milwaukee Corrugating Co.... 54
Milwaukee Pattern Works.... 50
Miskimen Furnace Co.... 13
Monroe Foundry & Furnace Co.... 19
Montross Roofing Co.... 49
Morris Stove Repair Co.... 50
Moshiek, P.... 55
Mueller, L. J. Furnace Co.... 10
National Enameling & Stamping Co.... 67
Niagara Machine & Tool Works.... 55
Nilson Walters Wrench Co.... 48
Nineteen Hundred Washer Co.... 60
Norris & Loring Hdw. Co.... 48
North Bros. Mfg. Co.... 58
Obermayer, S. Co.... 51
O'Halloran & Jacobs.... 55
Osgood Scale Co.... 68
Pelouze Scale & Mfg. Co.... 59
Perkins, J. L. & Co.... 1
Peters Cartridge Co.... 68
Pittsburgh Stove & Range Co.... 2
Plume & Atwood Mfg. Co.... 56
Portsmouth Stove & Range Co.... 2
Powers Bros.... 1
Pullman Mfg. Co.... 63
Quincy Washing Machine Co.... 61
Rea, E. K.... 56
Resor & Co., Wm.... 4
Richards Mfg. Co.... 62
Richardson & Boynton Co.... 12
Roberts Chemical Co.... 51
Roberts Heating & Ventilating Co.... 9
Robinson Furnace Co.... 17
Rochester Radiator Co.... 15
Rohrbacher & Allen.... 16
St. Louis Electrotype Fdy.... 49
Sandusky Tool Co.... 63
Sanitary Pump & Tubing Co.... 59
Schwab & Sons Co.... 14
Security Lightning Rod Co.... 56
Seither Cherry Co.... 64
Sheet Metal Specialty Co.... 55
Signal Mail Box Co.... 49
Smith & Anthony Co.... 16
Smith, Chas. Co.... 16
Smith & Hemenway Co.... 62
Sperry, D. R. & Co.... 64
Stanley Rule & Level Co.... 63
Stanton Heater Co.... 14
Star Shovel & Range Co.... 16
Stern, P. T.... 48
Stevens Arms & Tool Co.... 68
Stevens, F. B.... 51
Stockhoff Supply Co.... 15
Stowell Mfg. & Fdy. Co.... 18
Stuber & Kuck.... 62
Swan, J. T.... 59
Thatcher Furnace Co.... 18
Titchener & Co.... 16
Union Brick Bond Co.... 57
Utica Drop Forge Co.... 62
Van Pelt, Chas. A.... 64
Vollrath Mfg. Co.... 66
Voss Bros. Mfg. Co.... 58
Warren, J. D. Mfg. Co.... 57
Weiss, H. & Co.... 55
Weller Pattern Co.... 50
White Lily Washer Co.... 59
White, Thomas, Stove Co.... 5
Wickramanayata & Co.... 48
Wise Furnace Co.... 15
Zucker & Levett & Loeb Co.... 51


### CLASSIFIED LIST.


**Andirons.**
Blacklock Foundry.... 58

**Ash Doors.**
Stowell Mfg. & Fdy. Co.... 18

**Bolts.**
Atlas Bolt & Screw Co.... 1
Columbus Bolt Wks.... 1

**Brass**
Benedict & Burnham Brass and Copper Co.... 56
Plume & Atwood Mfg. Co.... 56

**Brick Handlers.**
Union Brick Bond Co.... 57

**Brick Ties.**
Union Brick Bond Co.... 57

**Bull Rings.**
E. K. Rea.... 56

**Burrs—Copper**
Plume & Atwood Mfg. Co.... 56

**Cans.**
Stuber & Kuck.... 62

**Carpenters' Tools.**
Sandusky Tool Co.... 63

**Cartridges.**
Norris & Loring Hdw. Co.... 48
Peters Cartridge Co.... 68

**Ceilings Metal.**
Berger Mfg. Co.... 52
W. J. Burton & Co.... 63
Canton Steel Roofing Co.... 52
J. H. Eller & Co.... 52
Friedley & Voshardt.... 53
Hopson-Haftencamp Co.... 49
Illinois Roofing & Supply Co.... 68
Kanneberg Roofing & Ceiling Co.... 52
Milwaukee Corrugating Co.... 54
J. L. Perkins & Co.... 1

**Chains.**
Bridgeport Chain Co.... 1

**Clothes Driers.**
Canton Clothes Dryer & Mfg. Co.... 64
Hill Dryer Co.... 64

**Coffee Mills**
Enterprise Mfg. Co. of Pa.... 65

**Conductor Hangers.**
Berger Bros. Co.... 53
Iwan Bros.... 56

**Conductor Pipe**
Berger Bros. Co.... 53
Berger Mfg. Co.... 52
Clark, Quien & Morse.... 53
Friedley & Voshardt.... 53
Garry Iron & Steel Co.... 54

**Copper.**
Benedict & Burnham Brass and Copper Co.... 56

**Corn Cribs.**
Denning Fence Works.... 64

**Cornices.**
Berger Mfg. Co.... 52
Cream City Cornice Co.... 53
J. H. Eller & Co.... 52
Galesburg Cornice Works.... 54
Milwaukee Corrugating Co.... 54
Sheet Metal Specialty Co.... 55

**Cornice Brakes.**
G. C. Keene & Co.... 56

**Corrugated Iron.**
Garry Iron & Steel Co.... 54
Milwaukee Corrugating Co.... 54

**Cream Separators.**
Galesburg Cornice Wks.... 54
Norris & Loring Hdw. Co.... 48
Seither, Cherry Co.... 64
Chas A. Van Pelt.... 64

**Cream Separator Faucets.**
Clark Novelty Co.... 64

**Cutlery.**
Cronk & Carrier Mfg. Co.... 62
Smith & Hemenway Co.... 62

**Dampers**
Wm. T. Dust Co.... 50
S. M. Howes Co.... 50

**Dies—Sheet Metal.**
Globe Machine & Stamping Co.... 62

**Door Hangers.**
Cronk & Carrier Mfg. Co.... 62
Richards Mfg. Co.... 62

**Drills.**
North Bros. Mfg. Co.... 58

**Eaves Trough.**
J. H. Eller & Co.... 52
Garry Iron & Steel Co.... 54
Kanneberg Roofing & Ceiling Co.... 52

**Eaves Trough Formers.**
G. E. Bishop.... 54

**Electro-Platers' Supplies.**
Roberts Chemical Co.... 51

**Electrotypes.**
St. Louis Electrotype Fdy.... 49

**Enamel Ware.**
Enterprise Enamel Co.... 49
Lalance & Grosjean Mfg. Co.... 66
Nat'l Enameling & Stamping Co.... 67
Vollrath Mfg. Co.... 66

**Enameling.**
C. N. Hooper.... 48

**Exporters.**
Carr & Co.... 58

**Faucets.**
Clark Novelty Co.... 64

**Fence Gates.**
Denning Fence Works.... 64

**Files.**
C. & H. Barnett Co.... 1
Henry Disston & Sons.... 65

**Forming Rolls.**
G. C. Keene & Co.... 56
Niagara Machine & Tool Works.... 55

**Foundry Supplies.**
S. Obermayer Co.... 51
F. B. Stevens.... 51

**Furnaces—Hot Air.**
American Furnace Co.... 15
Auer Register & Mfg. Co.... 18
Estate of P. D. Beckwith.... 20
Bergstrom Bros. & Co.... 10
Bonnot Co.... 17
Boynton Furnace Co.... 11
Chappell Furnace Co.... 13
Chicago Furnace Supply Co.... 19
Craig-Reynolds Foundry Co.... 11
Detroit Heating & Lighting Co.... 14
Excelsior Steel Furnace Co.... 19
Germer Stove Co.... 8
Green Fdy. & Furnace Wks.... 19
Hart & Crouse Co.... 14
Haynes-Langenberg Mfg. Co.... 10
Henry & Scheible Co.... 17
John Kontny.... 11
Lennox Furnace Co.... 17
Meyer Furnace Co.... 12
Miskimen Furnace Co.... 13
Monroe Foundry & Furnace Co.... 19
L. J. Mueller Furnace Co.... 10
Pittsburgh Stove & Range Co.... 2
Richardson & Boynton Co.... 12
Robinson Furnace Co.... 17
Roberts Heating & Ventilating Co.... 9
Rohrbacher & Allen.... 16
Schwab & Sons Co.... 14
Smith & Anthony Co.... 16
Chas. Smith Co.... 16
Stanton Heater Co.... 14
Stockhoff Supply Co.... 15
Thatcher Furnace Co.... 18
Wise Furnace Co.... 15

**Furnace Pipe and Fittings.**
Chicago Furnace Supply Co.... 19
Excelsior Steel Furnace Co.... 19
F. Meyer & Bro. Co.... 12
Roberts Heating & Ventilating Co.... 9
Stockhoff Supply Co.... 15

**Fuel Economizers.**
W. J. Burton Co.... 63

**General Merchandise.**
Lyon Bros.... 3

**Hardware Jobbers.**
Clark, Quien & Morse.... 53
Lee-Glass-Andreesen Hdw. Co.... 67
Norris & Loring Hardware Co.... 48

**Hardware Shelving.**
J. D. Warren Mfg. Co.... 57

**Hardware Specialties.**
Clark Novelty Co.... 64
F. D. Kees.... 63
Richards Mfg. Co.... 62
J. T. Swan.... 59

**Hay Carriers.**
Stowell Mfg. & Fdy. Co.... 18

**Hay Knives.**
Iwan Bros ..... 56
Stowell Mfg. & Fdy. Co. ..... 18

**Heaters—Steam and Hot Water.**
American Radiator Co ..... 47
Boynton Furnace Co ..... 11
Hart & Crouse Co ..... 14
Haynes-Langenberg Mfg. Co ..... 10
Monroe Foundry & Furnace Co ..... 19
L. J. Mueller Furnace Co ..... 10
Wm. Resor & Co ..... 4
Richardson & Boynton Co ..... 12
Roberts Heating & Ventilating Co 9
Chas. Smith Co ..... 16
Thatcher Furnace Co ..... 18

**Hoes.**
Sandusky Tool Co ..... 63

**Hollow Ware.**
Avery Stamping Co ..... 63
Blacklock Foundry ..... 58
D. R. Sperry & Co ..... 64

**Hot Water Attachments.**
Rohrbacher & Allen ..... 16
Chas. Smith Co ..... 16

**Ice Cream Freezers.**
North Bros. Mfg. Co ..... 58

**Lanterns.**
Berger Mfg. Co ..... 52

**Levels.**
Baker McMillan Co ..... 58
Stanley Rule & Level Co ..... 63

**Lighting Systems.**
Detroit Heating & Lighting Co ..... 14

**Lightning Rods.**
Maher & Son ..... 56
Security Lightning Rod Co ..... 56

**Lock Nuts.**
American Lock Nut Co ..... 54

**Mail Boxes.**
Century Post Co ..... 49
Hopson-Haftencamp Co ..... 49
Signal Mail Box Co ..... 49

**Meat Choppers.**
Enterprise Mfg. Co. of Pa ..... 65
Smith & Hemenway Co ..... 62

**Metal Polish.**
Geo. W. Hoffman ..... 57

**Metal Workers' Manual.**
J. M. McFarland ..... 57

**Mica.**
A. G. Brauer ..... 50
Wm. T. Dust Co ..... 50

**Nail Pullers.**
Norris & Loring Hdw. Co ..... 48
Smith & Hemenway Co ..... 62

**Nickel Plating Outfits.**
Zucker & Levett & Loeb Co ..... 51

**Nuts.**
American Lock Nut Co ..... 54
Atlas Bolt & Screw Co ..... 1
Columbus Bolt Works ..... 1

**Oil Cans.**
Cooney & Geiger ..... 52

**Paints.**
Wm. Connors Paint Mfg. Co ..... 1
Jos. Dixon Crucible Co ..... 49

**Pencils.**
Jos. Dixon Crucible Co ..... 49

**Pliers.**
Cronk & Carrier Mfg. Co ..... 62
Utica Drop Forge Co ..... 62

**Pistols.**
Stevens Arms & Tool Co ..... 68

**Planes.**
Sandusky Tool Co ..... 63

**Plumbago.**
Wickramanayata & Co ..... 48

**Post Hole Augers.**
Iwan Bros ..... 56

**Potash.**
Roberts Chemical Co ..... 51

**Pruning Shears.**
Cronk & Carrier Mfg. Co ..... 62

**Pumps.**
Beckman Bros ..... 64
Sanitary Pump & Tubing Co ..... 59

**Punches.**
American Lock Nut Co ..... 54
Geo. C. Keene & Co ..... 56
Niagara Machine & Tool Wks ..... 55
H. Weiss & Co ..... 55

**Radiators.**
Hart & Crouse Co ..... 14
Rochester Radiator Co ..... 15

**Rain Water Cut Offs.**
Cooney & Geiger ..... 52

**Rasps.**
G. & H. Barnett Co ..... 1
Disston, Henry & Sons ..... 65

**Registers.**
Auer Register & Mfg. Co ..... 18
Chicago Furnace Supply Co ..... 19
Excelsior Steel Furnace Co ..... 19
Ferrosteel Co ..... 19
C. H. Foster ..... 18
Henry & Scheible Co ..... 17
Independent Register Co ..... 13
L. J. Mueller Furnace Co ..... 10
Roberts Heating & Ventilating Co 9
R. J. Schwab & Sons Co ..... 14
Stockhoff Supply Co ..... 15
Stowell Mfg & Fdy. Co ..... 18

**Rifles.**
Lee-Glass-Andreesen Hardware Co ..... 67
J. Stevens Arms & Tool Co ..... 68

**Rivets.**
Atlas Bolt & Screw Co ..... 1
Plume & Atwood Mfg. Co ..... 56

**Roofing—Iron and Steel.**
American Sheet & Tin Plate Co ..... 53
Berger Mfg. Co ..... 52
W. J. Burton Co ..... 63
Canton Steel Roofing Co ..... 52
Cortright Metal Roofing Co ..... 52
Cream City Cornice Co ..... 53
Follansbee Bros, Co ..... 52
Friedley & Voshardt ..... 53
Garry Iron & Steel Co ..... 54
Kanneberg Roofing & Ceiling Co ..... 52
Milwaukee Corrugating Co ..... 54
Montross Roofing Co ..... 49
J. L. Perkins & Co ..... 1

**Roofing Cement.**
Wm. Connors Paint Mfg. Co ..... 1
Garry Iron & Steel Co ..... 54
J. L. Perkins & Co ..... 1

**Roof Paint.**
Wm. Connors Paint Mfg. Co ..... 1
Joseph Dixon Crucible Co ..... 49
Garry Iron & Steel Co ..... 54
J. L. Perkins & Co ..... 1

**Rules.**
Lufkin Rule Co ..... 63
Stanley Rule & Level Co ..... 63

**Sad Irons.**
Blacklock Foundry ..... 58
Enterprise Mfg. Co. of Pa ..... 65

**Sash Balances.**
Pullman Mfg. Co ..... 63

**Saws.**
E. C. Atkins & Co ..... 68
Henry Disston & Sons ..... 65
Smith & Hemenway Co ..... 62

**Saw Sets.**
E. C. Atkins & Co ..... 68
Henry Disston & Sons ..... 65
Smith & Hemenway Co ..... 62

**Scales.**
Beckman Bros ..... 64
Osgood Scale Co ..... 68
Pelouze Scale & Mfg. Co ..... 59

**Screen Hinges.**
F. D. Kees ..... 63

**Screws.**
Atlas Bolt & Screw Co ..... 1
Columbus Bolt Works ..... 1
Sandusky Tool Co ..... 63

**Screw Drivers.**
North Bros. Mfg. Co ..... 58
Smith & Hemenway Co ..... 62

**Shears.**
Cronk & Carrier Mfg. Co ..... 62
Geo. C. Keene & Co ..... 56
Niagara Machine & Tool Works ..... 55
H. Weiss & Co ..... 55

**Sheet Metal Architectural Ornaments.**
Friedley & Voshardt ..... 53
Kanneberg Roofing & Ceiling Co ..... 52
Sheet Metal Specialty Co ..... 55

**Sheet Metal Specialties.**
Globe Machine & Stamping Co ..... 62
Kinsey Mfg. Co ..... 49
Sheet Metal Specialty Co ..... 55

**Shelf-Brackets.**
Atlas Mfg. Co ..... 68

**Shot Guns.**
Lee-Glass-Andreesen Hdw. Co ..... 67
Stevens Arms & Tool Co ..... 68

**Shovels.**
Avery Stamping Co ..... 63
Star Shovel & Range Co ..... 16

**Sifters.**
Hill Dryer Co ..... 64
Stuber & Kuck ..... 62

**Skylight Gearing.**
H. Weiss & Co ..... 55

**Skylights.**
Cream City Cornice Co ..... 53
Galesburg Cornice Works ..... 54
Sheet Metal Specialty Co ..... 55

**Slates and Slaters' Tools.**
Auld & Conger ..... 55
E. J. Johnson & Co ..... 55
O'Halloran & Jacobs ..... 55

**Squares, Machinists'.**
Henry Disston & Sons ..... 65
Stanley Rule & Level Co ..... 63

**Stampings—Sheet Metal.**
Globe Machine & Stamping Co ..... 62

**Staples.**
Titchener & Co ..... 56

**Steel Ranges.**
Ashland Steel Range & Mfg. Co ..... 6
Auer Register & Mfg. Co ..... 18
Beckwith, Estate of P. D ..... 20
Bergstrom Bros. & Co ..... 10
Chicago Stove Works ..... 7
Foster Stove Co ..... 7
Galusha Stove Co ..... 6
Gem City Stove Co ..... 7
John Kontny ..... 11
Pittsburgh Stove & Range Co ..... 2
Portsmouth Stove and Range Co ..... 2
Wm. Resor & Co ..... 4
Star Shovel & Range Co ..... 16
Thatcher Furnace Co ..... 18

**Stoves.**
Ashland Steel Range & Mfg. Co ..... 6
Beckwith, Estate of P. D ..... 20
Bergstrom Bros. & Co ..... 10
Chicago Stove Works ..... 7
Foster Stove Co ..... 7
Galusha Stove Co ..... 6
Gem City Stove Co ..... 7
Germer Stove Co ..... 8
John Kontny ..... 11
Pittsburgh Stove & Range Co ..... 2
Portsmouth Stove & Range Co ..... 2
Wm. Resor & Co ..... 4
Smith & Anthony Co ..... 16
Star Shovel & Range Co ..... 16
White Stove Co ..... 5

**Stoves—Gas.**
Ashland Steel Range & Mfg. Co ..... 6
Pittsburgh Stove & Range Co ..... 2
Independent Register Co ..... 13

**Stoves—Gasoline.**
Kinsey Mfg. Co ..... 49

**Stoves—Oil.**
Kinsey Mfg. Co ..... 49
National Enameling & Stamping Co ..... 67

**Stove Cement.**
Jos. Dixon Crucible ..... 46

**Stove Clay.**
Bridgeport Crucible Co ..... 68

**Stove Mats.**
Stuber & Kuck ..... 62

**Stove Patterns.**
Geo. W. Cope, Pattern Works ..... 50
Mansfield Stove Pattern Works ..... 50
Milwaukee Pattern Works ..... 50
Weller Pattern Co ..... 50

**Stove Repairs.**
American Stove Repair Wks ..... 50
A. G Brauer ..... 50
Wm. T. Dust Co ..... 50
Great Western Stove Repair Co ..... 50
S. M. Howes Co ..... 50
J. L. Morris Stove Repair Co ..... 50

**Sugar Kettles.**
Blacklock Foundry ..... 58
Sperry & Co ..... 64

**Tapes**
Lufkin Rule Co ..... 63

**Thermometers—Oven.**
Evans Stamping & Plating Co ..... 51

**Tinners' Furnaces.**
Clayton & Lambert Mfg. Co ..... 54

**Tinners' Tools.**
G. E. Bishop ..... 54
Niagara Machine & Tool Works ..... 55
H. Weiss & Co ..... 55

**Tinplate.**
American Sheet & Tin Plate Co ..... 53
Berger Mfg. Co ..... 52
Canton Steel Roofing Co ..... 52
J. H. Eller & Co ..... 52
Follansbee Bros. Co ..... 52
Garry Iron & Steel Co ..... 54
Illinois Roofing & Supply Co ..... 68
Lee-Glass-Andreesen Hdw. Co ..... 67
McClure Co ..... 68
Milwaukee Corrugating Co ..... 54
Stockhoff Supply Co ..... 15

**Tinware.**
Enterprise Enamel Co ..... 49
Hill Dryer Co ..... 64
Lalance & Grosjean Mfg. Co ..... 66
P. Moshiek ..... 55
National Enam. & Stamping Co ..... 67
Stuber & Kuck ..... 62
Vollrath Mfg. Co ..... 66

**Trowels.**
Avery Stamping Co ..... 63
H. Disston & Sons ..... 65

**Tubing.**
Benedict & Burnham Brass and Copper Co ..... 56
Sanitary Pump & Tubing Co ..... 59

**Tumbling Barrels.**
Globe Machine & Stamping Co ..... 62

**Ventilators.**
Cream City Cornice Co ..... 53
Crown Ventilator Co ..... 55
Friedley & Voshardt ..... 53
Globe Ventilator Co ..... 68
Iwan Bros ..... 56
Powers Bros ..... 1
Sheet Metal Specialty Co ..... 55

**Wagon Brackets.**
Norris & Loring Hdw. Co ..... 48
J. T. Swan ..... 59

**Wash Boilers.**
P. Moshiek ..... 55
Stuber & Kuck ..... 62

**Washing Machines.**
H. F. Brammer Mfg. Co ..... 59
Clark, Quien & Morse ..... 53
J. M. Gagan & Co ..... 59
"1900" Washer Co ..... 60
Quincy Washing Machine Co ..... 61
Voss Bros. Mfg. Co ..... 58
White Lily Washer Co ..... 59

**Water Supplies.**
Horigan Supply Co ..... 60

**Weather Strips.**
Norris & Loring Hdw. Co ..... 48

**Wire Fence.**
Denning Fence Works ..... 64
F. D. Kees ..... 63
Chas. A. Van Pelt ..... 64

**Wire Goods.**
Denning Fence Words ..... 64
Titchener & Co ..... 56
Chas. A. Van Pelt ..... 64

**Wrenches.**
Hawkeye Wrench Co ..... 62

# Trade Report.

### CHICAGO IRON MARKET.

The first half of 1904 has ended with a restrictive tendency in the pig iron output which will go far toward restoring prices to a more satisfactory basis. There is a decided movement on the part of furnaces to prevent accumulation of stock. Moreover, there is an involuntary tendency in this direction resulting from the numerous labor disagreements. This is particularly true of such interests as the sheet and tin-plate and bar mills. A permanent agreement with its employes was made by the American Sheet & Tinplate Co. Wages were reduced on a basis of 18 per cent from last year's. This leaves wages as they have been since the special April conference. Other mills have not been so fortunate, however. There is a possibility of enforced idleness in the near future. The machinists' strike in this city is well nigh broken at the present writing. Most of the shops are in operation at full time.

The pig iron situation is practically unchanged. A better feeling has materialized, however, and the crisis seems to have passed. There is a heavier tendency to buy, and a slighter one to sell at the present schedule. Furnaces are holding off to some extent. Contracts for future delivery at the present scale are not considered good investments by most sellers. As a consequence a slight rise in the prise schedule of Southern irons has developed. Northern irons are very firm. Inquiries for all grades have been numerous. These are regarded generally as feelers put out to sound the market. Stocks in foundries are getting low and buyers seem anxious to lay in a season's supply at the present schedule. The International Harvester Co. is reported on the market for about 25,000 tons of pig iron. So far they have been unable to place the order, indicating that the present scale of prices is pretty firm. Furnaces are quite willing to extend deliveries on present schedule orders to the next ninety days but not a week longer.

### CHICAGO HARDWARE SCRAPS.

The first half of the present year has brought good cause for congratulation. Compared with other national-election years it has been a banner year. Compared with last year it shows no inferiority. Most dealers, however pessimistic they may feel, will find on adding both sides of the ledger that the present half-year's sales were fully as plentiful and profitable as those of the corresponding period last year. Though the downward tendency is marked and steady, some manufacturers have found it desirable to raise their schedule. A sharp advance is to be noted in agricultural wrenches. The discount allowed on Girard's and P. S. & W. agricultural wrenches is 75 and 10 per cent. Hammers have advanced 10 per cent; hammers and hatchets, 5 per cent; double-pointed tacks, from 10 to 15 per cent. On the other hand, door knobs have declined about 10c per doz. We quote as follows to retailers: Mineral, 70c per doz.; porcelain, 80c per doz.; jet, 80c per doz. Sash weights are $1 per ton lower—$20.00 per ton, f. o. b. Chicago.

### IRON AND STEEL BARS.

The local implement concern is shading the association price $2 per ton, for steel bars. Some new business in this line has been drawn out by this means. The trade has lost interest in iron bars. Prices are not firm, and any heavy order would probably bring forth better rates than those quoted below. Specifications continue active. Hoops are quiet; small angles more so than for the past few weeks.

We quote as follows: Bar iron, 1.30c to 1.35c, base, half extras; soft steel bars, 1.40c to 1.51½c, half extras; soft steel angles, less than 3x3, 1.61½c; hoops, 1.71½c. On lots from store, we quote: Iron bars, 1.75c base, full extras; steel bars, 1.70c to 1.80c, base, half extras; hoops, 2c to 2.10c rates, full extras.

### SHEETS.

The demand for both black and galvanized sheets has improved considerably. The threatened shut-down of mills for repairs has brought forth a large conflux of orders. Nevertheless, prices continue very irregular. Some buyers are getting $2 a ton better than the $2.20 Pittsburgh scale for No. 28.

We have revised our prices, and quote as follows: For one pass, cold rolled, blue-annealed sheets, mill shipments, Chicago delivery: Nos. 8 and 10, 1.79½c; Nos. 11-12, 1.81½c to 1.86½c; Nos. 13-14, 1.86½c to 1.91½c; Nos. 15-16, 1.91½c to 2.01½c. On box annealed, one pass, cold rolled: Nos. 18-20, 2.06½c to 2.11½c; Nos. 22-24, 2.11½c to 2.16½c; Nos. 25-26, 2.16½c to 2.21½c; No. 27, 2.21½c to 2.26½c; No. 28, 2.31½c to 2.36½c; No. 29, 2.46½c to 2.51½c; No. 30, 2.56½c to 2.61½c. Store trade is brisk and a good volume of business has been booked by local jobbers within the week past. Prices have been reduced $2 a ton, and we now quote as follows: No. 10 and heavier, 2c to 2.10c; No. 12, 2.05c to 2.15c; No. 14, 2.10c to 2.20c; No. 16, 2.20c to 2.30c; No. 18, 2.30c to 2.40c; No. 20, 2.30c to 2.40c; No. 22, 2.35c to 2.45c; No. 24, 2.40c to 2.50c; No. 26, 2.50c to 2.60c; No. 27, 2.60c to 2.70c; No. 28, 2.70c to 2.80c; No. 29, 2.85c to 2.95c. Galvanized sheets are quiet, and we quote Pittsburgh discounts, f. o. b. mill, 80 and 5 to 80 and 10. For shipments from local store, 75, 10 and 5 to 80 per cent.

### PLATES.

Along with a feebler demand, comes the announcement that many mills are quoting $2 a ton lower than association prices on plates 48 inches wide and under. We quote carload lots, mill shipments, Chicago delivery, as follows: Tank steel, ¼-inch and heavier, 1.76½c; flange steel, 1.86½c; marine, 1.96½c; universal mill plate, 1.76½c to 1.81½c; 3-16-inch, 1.86½c; Nos. 7 and 8, 1.91½c; No. 9, 2.01½c; No. 10, 1.91½c; No. 11, 1.96½; No. 12, 2.01½c. From store,

we quote tank steel, ¼-inch and heavier, 2c; 3-16, 2.10c; No. 8, 2.15c; No. 10, 2.15c; flange steel, 2.25c, all f. o. b. warehouse.

### RAILS AND TRACK SUPPLIES.

Light rails are not in great demand at present. Prices have weakened in consequence. It is said that the local plant is sacrificing profits to maintain continual operation. Heavy rails fare but little better. Inquiries for the latter commodity are numerous but unpromising. Track supplies are selling freely. The prices given below on light rails and track supplies may be shaded about $1 a ton on desirable business. We quote heavy sections, mill shipments, 500 tons and over, $28; less than 500 tons to carload lots, $30; less than carload lots, $32; second quality rails, $27; light rails, $23 to $25; track supplies, f. o. b. Joliet mill: angle bars, 1.35c to 1.45c; spikes, first quality, 1.65c to 1.75c; track bolts, 3½x¾, with square nuts, 2.20c to 2.30c per 100 lbs.; with hexagon nuts, 2.35c to 2.45c.

### MERCHANT PIPE.

A change of schedule on the part of the independent manufacturers is much bruited. New business is quiet, and installments on contract orders are not much in demand.

No change in the quotations of the leading interest has been made, however, and we continue to quote carload lots, mill shipments, random lengths, f. o. b. Chicago, as follows:

| | Steel Pipe. | | Guaranteed Wrought Iron Pipe. | |
|---|---|---|---|---|
| | Black. | Galv. | Black. | Galv. |
| | Per cent. | Per cent. | Per cent. | Per cent. |
| ⅛ to ⅜ inch.... | 67.35 | 57.35 | 64.35 | 54.35 |
| ½ inch ..... | 70.35 | 60.35 | 67.35 | 57.35 |
| ¾ to 6 inches ... | 74.35 | 64.35 | 71.35 | 61.35 |
| 7 to 12 inches... | 69.35 | 59.35 | 66.35 | 56.35 |

Less than carloads, 12½ per cent advance.

### CHAIN AND CHAINS.

There is a marked decline of price in this commodity. Quotations by local jobbers are as follows:

Cable Coil Chain—

| Inch. | 3-16 | 1-4 | 5-16 | 3-8 |
|---|---|---|---|---|
| Per 100 lbs. ..... | 8.75 | 6.15 | 5.00 | 4.25 |
| Inch. | 7-16 | 1-2 | 5-8 | 3-4 |
| Per 100 lbs. ..... | 4.05 | 3.90 | 3.80 | 3.70 |
| Inch. | 7-8 | 1 | 1 1-4 | |
| Per 100 lbs ..... | 3.60 | 3.60 | 3.60 | |

Cable Log Chains—

Advance 35c per 100 lbs. on cable coin chains.

Special Steel Loading Chain—

| Inches. | 1-4 | 9-32 | 5-16 |
|---|---|---|---|
| Per 100 lbs. ..... | 16.00 | 13.50 | 12.50 |

### STOVE BOARDS.

Concessions in price are now obtainable, owing to the fierce competition between amalgamated and independent interests.

### LINSEED OIL.

An advance in the price of seed has strengthened the market, but official quotations for oil remain unchanged. It is said that crushers' stock of oil and seed is low. It is not probable that any great quantities of seed will be bought while oil is at its present low level.

### COPPER.

The market for ingot copper was quiet and unchanged yesterday, not having changed for the week: Lake is quoted at 12⅝@12¾c; electrolytic, 12½@12⅝c; casting, 12⅛@12¼c. The London closing was cabled quiet: Standard copper, spot, £56 16s 3d; futures, £56 15s.

The Copper Manufacturers' Association quotes manufactured copper steady and unchanged on a basis of 18c per lb. for sheets and bars. Yellow sheathing material is quoted on a basis of 15c.

### PIG TIN.

Pig tin has been more or less irregular all the week, the market closing dull yesterday in New York but firm, and 3s higher in London. The London closing was cabled firm at £117 15s for spot and £117 5s for futures. Spot tin was quoted at 25¾@26c in New York, with futures at 25.62½@26c. The jobbing price is 26½@26¾c.

### TIN PLATES.

Tin plates are steady at the following prices: Melyn, $6@6.50; Alloways, $5.25@5.75; coke, $4.87½@6.50; ternes, $4.50@7; additional X, $1.50@1.75 more.

### LEAD.

The American Smelting & Refining Company has not changed the price of pig lead during the week, the price now being 4.20c for 50-ton lots in New York and 4.27½c for 25-ton lots, both for future shipment. Spot lots are quiet at 4.25@4.30c in New York. St. Louis is quoted at 4.12½c. The jobbing price is 4¾5c, according to quantity. The London quotation is £11 8s 9d.

Manufactured lead is firm at: Lead pipe, 6¾c; sheet, 8¼c; tin pipe, 50c; tin-lined pipe, 12½c; old lead in exchange, 3¾c; tea lead, 3¼c.

### SPELTER.

Spelter is quiet: Round lots, New York, 4.80@4.90c for spot and futures; jobbing, 5⅜@5⅝c.

### ZINC.

Sheet zinc, cask lots, 6⅛c; small lots, 7⅛c; St. Louis is steady at 4.70c; London, £22.

### ANTIMONY.

Antimony is quiet and easier; round lots, New York: Cookson's, 7@7½c; Hallet's, 7@7¼c; United States, 6@6¼c; Italian, French and Japanese, 6@6¼c.

### NICKEL.

Nickel, 40@47c for large lots, and 50@60c for small lots.

### QUICKSILVER.

Quicksilver, New York, $44.50@45 per flask for large lots; small orders, $46; San Francisco, $44@45, domestic orders; for export, $41.50@42; London, £8.

# Current Hardware and Metal Prices.

**THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.**

## METALS.

### FIRST QUALITY BRIGHT PLATES.

| | | | Per Box. |
|---|---|---|---|
| IC | 14x14 | | $10 25 |
| IC | 14x20 | | 6 75 |
| IX | 14x20 | | 8 00 |
| IXX | 14x20 | | 9 20 |
| IXXX | 14x20 | | 11 60 |
| IXXXX | 14x20 | | 12 85 |
| IC | 20x28 | | 13 50 |
| IX | 20x28 | | 16 00 |
| IXX | 20x28 | | 18 40 |
| IXXX | 20x28 | | 20 80 |
| IXXXX | 20x28 | | 23 20 |

### COKE PLATES.

| | | | |
|---|---|---|---|
| Cokes, 180 lbs | IC | 20x28 | 8 50 |
| Cokes, 200 lbs | IC | 20x28 | 8 80 |
| Cokes, 216 lbs | IC | 20x28 | 9 10 |
| Cokes, 216 lbs | IX | 20x28 | 11 10 |

### PIG IRON.

| | |
|---|---|
| Lake Sup. Charcoal | $14 50@$15 00 |
| Local Coke Fdy No. 1 | 13 75@ 14 00 |
| Local Coke Fdy No. 2 | 13 25@ 13 50 |
| Local Coke Fdy No. 3 | 13 00@ 13 25 |
| Local Scotch Fdy No. 1 | 14 25@ 14 50 |
| Ohio Strong Softeners, No. 1 | 14 80@ 15 30 |
| Southern Silvery | 14 85@ 15 85 |
| Southern Coke No. 1 | 13 15@ 13 40 |
| Southern Coke No. 2 | 12 65@ 12 90 |
| Southern Coke No. 3 | 12 40@ 12 65 |
| Southern Coke No. 4 | 12 15@ 12 40 |
| Southern No. 1 Soft | 13 15@ 13 40 |
| Southern No. 2 Soft | 12 65@ 12 90 |
| Alabama Car Wheel | 18 85@ 19 35 |
| Malleable Bessemer | 14 00@ 14 50 |
| Jackson Co. Silvery | 17 80@ 18 30 |

### BLACK SHEET STEEL.

| | | |
|---|---|---|
| No. 16 | per 100 lbs. | $2 40 |
| No. 18-20 | per 100 lbs. | 2 45 |
| No. 22-24 | per 100 lbs. | 2 50 |
| No. 25-26 | per 100 lbs. | 2 55 |
| No. 27 | per 100 lbs. | 2 60 |
| No. 28 | per 100 lbs. | 2 70 |
| No. 29 | per 100 lbs. | 2 90 |

### POLISHED SHEET STEEL.

| | |
|---|---|
| No. 24 per 100 lbs | $4.85 |
| No. 26 " " | $5.05 |
| No. 27 " " | $5.05 |
| No. 28 " " | $5.15 |

### SMOOTH STEEL.

| | | |
|---|---|---|
| Wood's Smooth | No. 15-17 | 2 85 |
| " " | No. 18 | 2 95 |
| " " | No. 20 | 2 80 |
| " " | No. 22-24 | 2 90 |
| " " | No. 25-26 | 3 00 |
| " " | No. 27 | 3 10 |
| " " | No. 28 | 3 20 |

### PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel.
"A" $10 20, "B" $9 20

### GALVANIZED IRON

| | |
|---|---|
| No. 16 (regular sizes) per 100 lbs. | $2 80 |
| Nos. 18 & 20, per 100 lbs | 2 95 |
| Nos. 22 & 24, per 100 lbs | 3 10 |
| No. 26, per 100 lbs | 3 30 |
| No. 27, per 100 lbs | 3 50 |
| No. 28, per 100 lbs | 3 70 |
| No. 30, per 100 lbs | 4 60 |
| Nos. 22 & 24 x 36 in., per 100 lbs | 3 30 |
| No. 26 x 36 in., per 100 lbs | 3 50 |
| No. 27 x 36 in., per 100 lbs | 3 70 |
| No. 28 x 36 in., per 100 lbs | 3 90 |

### SOLDER.

| | |
|---|---|
| XXX Guaranteed ½&½ | per lb. 20¼c |
| Commercial ½&½ | per lb. 19 c |
| No. 1 Plumbers | 17¾c |

### SHEET ZINC.

| | |
|---|---|
| 600 lb. Casks | base, per cwt. $6.25 |
| 300 lb. Casks | per cwt. 6.45 |
| Sheets | per cwt. 6.50 |

### COPPER.

Copper ..... base, 21c

### TIN PIGS AND BARS.

| | |
|---|---|
| Banca, pigs, per lb | 35@35½c |
| Straits pigs, per lb | 35c |
| Straits in bars, per lb | 37c |

### LEAD.

| | |
|---|---|
| American Pig | $4 60@4 62½c |
| Bar | 6¼ |
| National (White) brands (in less than 100 lb. lots) per lb | 7½ |
| *Sheet.* | |
| Full coils per 100 lbs. | $6.75 |
| Cut " " " | 7.25 |

## HARDWARE.

### ADZES.

| | |
|---|---|
| *Carpenters'.* | |
| Ajax | 25&10% |
| Blood's | 40&10% |
| Hunt's | 25% |
| White's | 12½% |
| *Coopers'.* | |
| Barton's | 20% |
| White's | 15% |
| *Ship.* | |
| Ajax | 33⅓% |
| Blood's | 37½% |
| Hunt's | 25% |
| White's | 12½% |

### AMMUNITION.

| | |
|---|---|
| *Caps, Percussion—per 1,000.* | |
| F L Waterproof, 1-10s | 40c |
| G D | 35c |
| Eley's | 52c |
| *Cartridges.* | |
| Peters Rim Fire Ctgs | 50&2% |
| Peters Cent Fire, Pistol & Rifle | 25&2% |
| Peters Cent Fire, Military and Sporting Ctgs | 15&2% |
| Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount. | |
| Peters Blank Ctgs. 22 cal | $1 18 |
| Peters Blank Ctgs. 32 cal., C. F. | 4 40 |
| Peters B B Caps, Round ball | $1 44 |
| Peters B B Caps, Conical ball | $1 85 |
| Winchester Cent. Fire, Military and Sporting Ctgs | 15&8% |
| U. M. C. B B Caps, Con. Ball | $1 85 net |
| U. M. C. Rim Fire Shot Ctgs | 50&15&3% |
| U. M. C. Cent. " " " | 25&15&3% |
| *Primers.* | |
| Berdan Primers | $1 00 |
| Peters Primers | 1 20 |
| Winchester Primers | 1 20 |
| *Shells.* | |
| Peters Empty Paper Shells, 10 and 12 gauge. League | 25&2% |
| Peters Empty Paper Shells, 16 gauge. League | 20&2% |
| Peters New Victor Nitro Shls | 20&2% |
| Ideal | 25&7% |
| Peters Loaded Shells. League and Referee Semi-Smokeless | 40&1% |
| Peters New Victor Loaded Shells with King's Smokeless | 40&6% |
| Ideals Loaded with King's Smokeless | 40&10&10&1% |
| Winchester Blue Rivals | 40&1% |
| Winchester Yellow Rivals | 40&1% |
| Winchester Repeater | 20&2% |
| Winchester Leader | 40&6% |
| U. M. C. Loaded Shells, Black Powder | 40&1% full cases |
| Winchester Loaded Shells, Black Powder | 40&1% full cases |
| *Gun Wads—per 1,000.* | |
| Peters Gun Wads | 18% |
| U. M. C. Gun Wads | 18% |

| *Powder.* | | Each |
|---|---|---|
| King's Smokeless, kegs | | $11 30 |
| " " | ½ kegs | 5 80 |
| " " | ¼ kegs | 2 97 |
| " " | 1-lb. cans | 51 |
| " " | 1-lb. " rifle | 70 |
| Dupont's " | 50-lb. drum | 22 45 |
| " " | 25-lb. kegs | 11 30 |
| " " | 12½-lb. kegs | 5 80 |
| " " | 6¼-lb. kegs | 2 97 |
| " " | 1-lb. cans | 51 |

| | |
|---|---|
| *Shot.* | |
| Dropshot, sizes smaller than B, 25-lb. bags, per bag | $1 60 |
| Drop shot, B and larger sizes, 25-lb. bags, per bag | 1 85 |
| Buck Shot, 25-lb. bags, per bag | 1 85 |
| Chilled Shot, 25-lb. bags, per bag | 1 85 |

### ANVILS.

| | |
|---|---|
| Trenton, 70 to 80 lbs | 9¾c per lb |
| Trenton, 81 to 150 lbs | 9c per lb |

### AUGERS.

| | |
|---|---|
| *Boring Machine* | 60&10&5% |
| Irwin's | 40&10% |
| *Carpenters' Nut* | 60&10&5% |
| *Hollow:* Ives' New Pattern | 35% |
| Bonney's—list $30.00 | 75&5% |
| Stearn's, No. 1 *doz.* | $42 00 |
| Stearn's, No. 3 " | 33 50 |
| *Post Hole.* | |
| Dalbey, 8-inch per doz. | $ 5 75 |
| Digwell, 8-inch " | 13 00 |
| Howe's, 6 and 8-inch " | 11 00 |
| Iwan's Improved | 40 & 5% |
| Vaughan's, 4 to 9-inch per doz. | 6 50 |
| *Rafting.* | |
| Snell's | 50&5% |
| *Ship.* | |
| Ford's, with or without screw | 40-5% |
| Snell's, " " " | 40-5% |

### AWLS.

| | | |
|---|---|---|
| *Brad*, handled per doz. | | $0 28 |
| shouldered, ass'd, 1 to 4 | per gr. | 95 |
| patent, asst'd, 1 to 4 | " | 90 |
| *Harness*, common | " | 1 10 |
| patent | " | 90 |
| *Peg*, shouldered | " | 95 |
| patent | " | 40 |
| *Scratch*, No. 2, handled | " | 4 40 |
| No. 1, socket handled | per doz. | 1 15 |
| No. 20 Hurwood | " | 2 00 |
| *Sewing*, common | per gr. | 90 |
| patent | " | 90 |

### AXES.

| | | |
|---|---|---|
| *Boys', Handled:* | | |
| Camp Fire, 3-lb., per doz | | $6 25 |
| " " 4-lb., freighters', per doz | | 7 85 |
| Cast Steel, good grade, pr. dz. | | 5 80 |
| Pioneer, per doz | | 7 00 |
| *Broad:* | | |
| Peerless | | 40&5% |
| Red Warrior, per doz | | $27 00 |
| *Firemen's*, per doz | | 1 50 |
| *Handled:* | | |
| Pioneer 3 in. to 4 in. base, doz | | 10 25 |
| For 3¼ in. to 4½ in. Adv. base | | 25 |
| For 4 in. to 5 in. Advance base | | 50 |
| For 4½ in. to 5½ in. Adv. base | | 75 |
| *Single Bitted* (without handles) | | |
| Gladstone, per doz 3 to 4 lbs | | $6 50 |
| Hubbard's conc. " " | | 6 75 |
| Hunt's " " | | 6 75 |
| Lippincott's " " | | 6 75 |
| Mann's " " | | 6 75 |
| Pioneer " " | | 7 25 |
| U. S. A. " " | | 9 00 |
| Valley Forge " " | | 6 75 |
| Second Quality " " | | 6 50 |
| Maricopa " " | | |

The above price of 3 to 4 lbs. is the base price.
3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ advance 75c.

| | | | | |
|---|---|---|---|---|
| *Double Bitted (without handles):* | | | | |
| Lippincott's 3 to 4 lbs per doz | | | | $9 50 |
| Mann's " " " | | | | 9 50 |
| Pioneer " " " | | | | 9 25 |
| U. S. A. " " " | | | | 11 00 |
| Valley Forge " " " | | | | 9 50 |

The above price of 3 to 4 lbs. is the base price.
3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ lb. advance 75c.

### BALANCES, SPRING.

| | |
|---|---|
| Frary's | 50% |
| Pelouze | 20% |

### BAGS, PAPER NAIL.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Pounds | 3 | 5 | 10 | 16 | 20 | 25 | |
| Per 1,000 | $1 60 | 1 85 | 2 60 | 3 40 | 3 90 | 4 75 | |

### BARS, CROW.

Pinch or Wedge Point ..... cwt. $2 95

### BASKETS.

| *Galvanized Iron—* | ½ Bu | 1 Bu | 1½ Bu |
|---|---|---|---|
| Per Doz | $4 00 | 5 50 | 7 00 |

### BEAMS—SCALE.

P. S. & W. Co. ..... 40%

### BEATERS.

| | | |
|---|---|---|
| *Carpet*, Rattan | per doz | $2 40 |
| Raymond's Steel Wire | " " | 80 |
| Woven Wire, No. 4 | " " | 1 10 |
| *Egg.* | | |
| Dover Pattern | per doz. | $0 70 |
| Genuine Dover | " | 0 90 |
| Mammoth Dover | " | 1 75 |
| Lightning | " | 0 84 |
| Lyon's (standard size) | " | 1 75 |
| Whip, French | " | 1 35 |
| Spiral | " | 0 40 |
| Spoon | " | 0 40 |
| Surprise | per gro. | 1 45 |

### BELLOWS.

| | | |
|---|---|---|
| *Blacksmiths'* | | 70&5% |
| *Hand*, 8 in. | per doz. | $ 6 85 |
| 10 in. | " | 8 40 |
| *Molders'*, 12 in. | per doz. | 13 00 |

### BELLS.

| | | |
|---|---|---|
| *Call.* | | |
| 2¾ in. nickeled bell | per doz. | $ 1 35 |
| 2¾ in. " brass bell | " | 3 60 |
| 3 in. " " " " | " | 7 50 |
| 3 in. " silver alloy bell, | per doz. | 16 50 |
| 4½ in. " brass bell and base | per doz. | 14 50 |
| *Cow.* | | |
| Ordinary Goods | | 70&5% |
| High Grade | | 60&10% |
| Jersey | | 70&10% |
| *Door.* | | |
| Bigelow Automatic | per doz. | $9 50 |
| Rotary. | | |
| 3 in. bronzed iron bell | " | 5 25 |
| 3 in. nickeled " " " | " | 7 50 |
| 3½ in. " " " " | " | 9 00 |
| *Hand.* | | |
| Hand Bells, Polished | | 60@60&10% |
| White Metal | | 50% |
| Nickel Plated | | 40% |
| Swiss | | 60&5% |
| Silver Chime | | 33⅓% |
| *Miscellaneous.* | | |
| Church and School, Steel Alloy | | 50, 10 & 5% |

| | | | | |
|---|---|---|---|---|
| Farm, lbs. | 40 | 50 | 75 | 100 |
| Each. | $1 10 | $1 30 | $1 85 | $2 65 |

### BEVELS—TEE.

| | |
|---|---|
| Stanley's, rosewood handle, new list | 40&5% |
| Stanley's Iron handle | 40&5% |

### BINDING—OIL CLOTH.

| | |
|---|---|
| Zinc | 75, & 10% |
| Brass | 75% |
| Brass Plated | 75 & 10% |

### BITS.

| | |
|---|---|
| *Auger.* | |
| Extra Double Spur | 70&10% |
| Ford's Car and Machine | 40&10% |
| Ford's | 40&5% |
| Ford's Ship | 40&5% |
| Irwin | 45% |
| New Jenning's | 50, 10&10% |
| Russell Jenning's | 35&10% |
| Clark's Expansive | 50, 10&5% |
| Steer's " Small | |
| new list | $22.00 |
| Irwin Car | 45% |
| Snell's Car | 60&5% |
| " Ship | 40&5% |
| Ford's " Auger Pattern Car | 40&5% |
| *Center* | 40&10% |
| *Countersink—* | |
| Wheeler's per doz. | $1 30 |
| American Snail Head " | 0 70 |
| " Rose " | 0 80 |
| " Flat " | 0 70 |
| Buck Bros'. Flat " | 2 60 |
| German " | 0 70 |
| *Dowel*, New Jennings | 40&10% |
| *Gimlet—* | |
| Standard Double Cut | 50&5@50&10% |
| German Pattern per doz. | $0 48 |
| Gouge " | 0 80 |
| Spoon " | 0 80 |
| Countersink " | 1 30 |
| *Reamer—* | |
| Buck Bros.' ½ Round. " | 2 75 |
| " " Square " | 2 50 |
| Standard ½ Round " | 0 75 |
| " Square " | 0 75 |
| German Octagon " | 0 75 |
| *Screw Driver—* | |
| Round Shank " | 0 48 |
| " " extra quality " | 1 40 |
| Square Shank " | 1 10 |

BLACKING—STOVE. (See Polish.)

### BLADES—SAW.

| | |
|---|---|
| *Butchers'—* | |
| Standard ¾ & 1¼ in | 60&5% |
| Clock Spring | 60&5% |
| Star | 30% |
| *Hack—* | |
| Disston's | 25&5% |
| Griffin's | 25&5% |
| Star | 30% |
| *Wood—* | |
| Jackson's per doz. | $2 25 |
| Disston's—No. 6, 16, 20 & 045, $4 20; No. 11, $6.30. | |
| W. M. & Co.'s No. 20 per doz. | $5 50 |

### BLOCKS.

| | |
|---|---|
| *Snatch—* | |
| Wooden | 55&10% |
| Steel | 40&10% |
| *Tackle—* | |
| Wooden | 70&5% |
| Steel | 50, 10&5% |

### BOARDS.

| | |
|---|---|
| *Stove* | 40% |
| *Wash—* | |
| Anchor per doz. | $1 60 |
| Globe " | 2 10 |
| Banner " | 2 60 |
| Crystal " | 3 15 |
| Brass King " | 3 15 |
| Nickel Plate " | 3 15 |
| Enamel King " | 3 15 |

### BOBS—PLUMB.

| | | |
|---|---|---|
| *Carpenters'*, 8½ oz. iron pr dz. | | $0 65 |
| 1½ lb. " " | " | 1 60 |
| 2¾ lb. " " | " | 1 80 |
| 13 oz. lead | " | 3 00 |
| 6½ oz. brass. | " | 3 30 |
| *Mason's*, 3 lb. lead | " | 4 00 |

### BOILERS—FARM.

| | |
|---|---|
| Profit | 30&5% |
| Solo | 35&5% |

### BOLTS.

| | |
|---|---|
| *Carriage, Machine, Etc.* | |
| Carriage, ⅜x6 and sizes smaller and shorter | 75% |
| Carriage, sizes larger and longer than ⅜x6 | 70@10% |
| Machine, ⅜x4 and sizes smaller and shorter | 75&5% |
| Machine, sizes larger and longer than ⅜x4 | 75% |
| Elevator | 50-10&5% |
| Plow | 60&5% |
| Stove | 80% |
| Tire | 72½&5% |
| Wagon Box Strap | 70&10% |
| *Mortise Door—* | |
| Gem | 50-10&5% |
| Ives' | 50&10% |
| *Barrel—* | |
| Cast | 50% |
| Wrought | 50&5% |
| " Bronzed | 75&5% |
| *Flush*, Wrought, B. K. | 40&5% |
| *Spring—* | |
| Wrought | 75&10% |
| " Brass | 75&10% |
| *Square—* | |
| Cast | 40% |
| Wrought | 60-10&10% |

### BORERS.

| | | | |
|---|---|---|---|
| *Angular*, Miller's Falls, per doz | | | $12 75 |
| *Bung*, Common Ring with Handle— Inches | 1⅛ | 1¼ | 2 |
| Per doz | $6 00 | 6 90 | 8 1 |

BORERS—CONTINUED.

Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2.00 each....25-10&5%

BOXES.

*Mail*, No..... 5 10 20
Per doz.....$3 65 10 50 13 00
*Wire*—
New Langdon.....15&5%
Olmsted's .....15%
Stanley's.....30%
Seavey's.....per doz 8 00
*Twine*, Nos... 20 30 25 121
Per doz ....$1 50

BRACES.

Common Ball.....$1 35@1 45
Barbers' Pattern ..... 50&10%
Fray's Gen. Spofford's.....50&10%
" No. 66 to 146.....50&10&7½%
P. S. & W. Co.'s Peck's Adjustable.....50-10&5%

BRACKETS.

*Hay-Rack*, Wenzelmann's No. 1, $12.60; No. 2, $13.20 per doz.
*Shelf*—
Cast Iron, Japanned .....50, 10, 10%
Stanley's Wrought Steel..... ..... 70-10&2½%
Wire.....75-10&5%

BROILERS.

Wire .....70&10%
Crown, Self-Basting, No.80..doz. $2 90

BUCKETS.

*Pump Rubber*—
Wychoff.....per gr. $4 75
Cooper..... " 5 50
Champion ..... " 7 50
Victor ..... " 9 50
Star..... " 5 00
IXL... ..... " 6 75
*Well*—
Galv'd Qts..... 10 12 14
Per doz .....$2 75 3 00 3 25
Wooden, top ear, plain, per doz 3 60
" " swivel " 4 85
" side-strap, plain " 3 70
" " swivel " 5 00

BUCKS, SAW.

Folding .....per doz $2 10

BURS, RIVETING.

Copper Burs Only.....35-10&5%
Tinners' Iron Burs Only.....70%

BUTTS.

*Cast-Iron*.....65&10%
*Wrought Brass*.....20%
*Wrought Steel Bright*—
Nos. 800, 804, 808, 810, 814 and 834 ..... 75&10%
Nos. 838, 840 and 842 .....75-10&10%
Nos. 822 and 832.....80-20&10%
*Wrought Steel, Japanned*—
Nos. 731 and 737.....70&10&10%

CALIPERS.

Double .....40&10%
Inside and Outside.....40&10%
Wing.....40&5%

CALKS.

*Logger's Boot*,(Lufkin R. Co's.) .....per M $3 65
*Toe*.
Shoenberger.....per lb. 5c
Bessemer ..... " 5½c
American ..... " 7½c
Swedes..... " 8½c

CANS.

*Cheese Factory Can Stock*—
Gallons.... 15 20 30 40
Per set....$3 40 $3 45 $3 70 $4 90
*Milk*
Elgin Pattern,
Nos..... .808, 810, 88.
Gal. ..... 8 10 8
per doz....$21.50 $24.50 $23.10
New Elgin Pattern,
Nos. 106 108 110
Gal. each, 5 8 10
Per doz., $16.75 $18.50 $19.85
Iowa Pattern.
Nos. 608 610
Gal. 8 10
Per doz $20.50 $21.50
New York Pattern,
Nos. 908, 910,
Gal. each, 8 10
Per doz. $25.15 $26.95
*Oil and Gasoline*—
1 Gal. glass, Daisy....per doz. $1 95
1 " cushioned " 3 15
Star, gals..... 1 2 3
Per doz..... $1 25 $2 30 $3 15
Per doz.
Sterling Tilting....5 gallon... $8 00
"High C" Pump...5 " ... 12 00
Eureka Pump.....5 " ... 9 25
Wood Jacket.....50-10&10%

CAPS—GUN.

See Ammunition.

CARRIERS.

*Hay*—
Myers' Imperial.....each $3 50
" Clover Leaf..... " 3 50

CARTRIDGES.

See Ammunition.

CASTERS.

*Acme*—Ball Bearing.....35%
*Bed*.....60, 10&5%
*Common Plate*—
Brass wheel..... .....60&10%
Iron and porcelain wheel.60, 10&5%
*Philadelphia Plate*.....70&5%
*Martin's*.....40-10&5%
*Payson's*..... 70&10%
*Tucker's*—Wood &Iron wheel...25&5%
" Rubber wheel..... 15%

CATCHERS—GRASS

Lieder's No. 1..... ...per doz. $6 25
Eureka..... ..... " 4 25
deal No. 4..... ..... 50

CHAIN AND CHAINS.

*Breast Chains*—
Doubleslack.....doz. pairs $5 75
With Covert snaps " 5 00
" slide..... " 3 25
Without slide..... " 2 85
*Bright Ox Chains*—
5-16in. $5 65: ⅝in. $5 40 per 100 lbs.
*Cable Coil Chain*—
Inch..... 3-16 ¼ 5-16 ⅜
Per 100 lbs....$3 75 $6 15 $5 00 $4 25
Inch ..... 7-16 ½ ⅝ ¾
Per 100 lbs....$4 05 $3 90 $3 80 $3 70
Inch ..... ⅞ 1 1¼
Per 100lbs.... $3 60 $3 60 $3 60
*Cable Log Chain*—Advance 35c per 100 lbs. on Cable Coil.
*Cow Tie Chains*—
American 2 toggle..... 50%
" toggle and snap... 50%
" open and closed ring..... 50%
*Halter Chains*—
American, new list.....33⅓%
German.....60-10&5%
Niagara, new list.....40&5
Triumph " .....30%
*Picture Chains*—
Light Brass, 3 ft.....per doz. 63c
Heavy " 3 "..... " 75c
*Pump Chain*—Galvanized per 100 lbs..... $4 75
*Safety Chain*—Brass.....60&10%
*Special Steel Loading Chain*—
Inch ¼ 9-32 5-16
Per 100 lbs.....$16 00 $13 50 $12 50
*Stretcher Chains*—
5-16 in., $8.50—⅜in., $7.75 per 100 lbs.
*Tie-Out Chains*—Browns.....70&10%
*Trace Chains*—Western Standard—
6½— 6-3.....per pair 27c
6½— 8-3..... " 31c
6½— 8-3..... " 30c
6½—10-3..... " 35c
7 — 8-2 ..... " 35c
7 —10-3..... " 39c
7 —10-1..... " 44c
7 —10-0..... " 55c
Add 2c per pair for Hooks.
" 2c " for Twist Link
*Wagon Stay Chains*—
Inch ¾ 5-16 ⅜
Per 100 lbs. $6.50 $6.00 $5.10

CHALK-CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l Crayon..... " 5½c

CHARCOAL.

In barrels .....per bu. 21c

CHECKS-DOOR.

Blount ..... 30%
Blum-Jap'd, $6.25; Brzd., doz... $7.00
Columbia.....50, 10&5%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

*Boz*—
Inches..... 10 12 14
Round....per doz. $2.10 $2.25 $2.75
Flat.....per doz. 2.85 3.60 4.20
*Cold*—
Good quality.....per lb. 12@ 20c
U.S.A.,extra quality..per lb. 28c
*Socket, Framing and Firmer*—
Barton's..... 20%
P. S. & W. Co's..... 70%
For beveled back, add..per doz..... 60c
*Tanged, Firmer*—
P. S. & W. Co's.....35&5%
With Handles add....per doz. 60c
*Choppers, Enterprise Meat*—
No. 12..... $2 75
No. 22..... 4 50

CHUCKS-DRILL.

Standard Tool Co.'s .....40%
Goodell's, for Goodell's Screw Drivers.....per doz. $6.25
Yankee, for Yankee Screw Drivers..... ..... 5.00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each ..... $3.90 4.15 4.40
Belle, Barrel..... 70&5%
Common Dash, Gal.... 4 5 6
Per doz..... $7.75 8.50 10.50
Hero.....70%
Union, Gal..... 5 7 10
Each ..... $3.65 3.90 4.75

CLAMPS

*Adjustable*—Martin's ..... 40%
*Carpenters'*—Steel Bar..... 30%
*Carriage Makers'*—P. S. & W. Co.'s..... .....40, 10&5%
*Hose*—
Sherman's, brass, ¾ in., .....per doz. 33c
Double, brass, ¾ in...per doz. 65c
*Saw Filers*—
Disston's list, $30.00..... 30%
Stearn's, No. 0, $3.50, No. 1, $11.50, No. 3, $5.50 doz.
Wentworth's..... 40%

CLAWS-TACK.

Cast, wood hdle...per doz., 45@ 60c
Forged steel, wood handle .....per doz. 80c
Solid Steel.....per doz. $1.60
Giant..... .....per doz. .60

*Drain*— CLEANERS.

Iwan's Adjustable.....50%
Iwan's Stationary.....40%
*Pot*—Wire.....per doz. $0.45
*Side-Walk*—Steel.....per doz. 3.15

XLCR.....65&5%

CLEAVERS.

*Family*—Ajax, In..... 6 7 8
Per doz ..... $5.50 5.75 6.25

CLEVISES.

Malleable.....per lb. 3⅝c

CLIPPERS.

Bolt..... ..... $1.90@4.75

CLIPS.

*Axle*.....65&5%
*Damper*—
Standard .....per doz. $0.70
Troy ..... " .38
*Hame*..... " .20

CLOTH.

*Emery*—
Ajax.....50&10%
B. & A.....50%
*Hardware Wire*--full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft. $1.85
9 to 12 " " " " 2.15
2 to 8 " galv, " " 2.70
7 and 8 " " " " 3.25
An extra charge is made for 50 ft. lengths, and a still further advance for smaller pieces.
*Screen Wire*--
12 mesh, painted, per 100 sq.ft. $1.30
14 " " " " 1.85

COCKS AND FAUCETS.

Compression Plain Bibbs..60-10-2½%
Lever Bibb Cocks .....70%
Compression Hose Bibbs.....60-10%
Telegraph Faucets (new list)...50-5%
Racking Cocks (new list) .....70-5%
Compression Lock C'ks(new list)70-5%
No. 65 Brass Liquor Cocks, doz. $9.15
Andrew's Brass Faucets .....70%
Angle Plug Faucets, per doz. ...$0.85
Milk Can Faucets, per doz..$2 60-4.20
Petroleum Faucets (new list)....70%

COFFEE MILLS.

Enter. Mfg. Co., list Jan 17, '93...25%
Parker's.....50%
Arcade.....60&10%

COLLARS--STOVE PIPE.

Inches 5 6 7
*Plain Tin*....per gr.$2.50 $2.80 $3.75
*Japanned Tin*, " 3.90 4.20 5.40
*Lacquered Brass*" 3.30 3.60 4.80

COMBS--CURRY.

Nos. 000 20 321 330 417 416
Per doz.$0.32 .80 1.00 .95 .80 1.00
Nos. 531 533 530 535 545 390
Per doz.$0.96 1.20 1.10 1.65 1.40 1.30

COMPASSES.

*Carpenter's*..... 70%
*Pencil*--Faber's.....per doz.$1.00

COPPER—SEE METALS.

COPPERS.

*Soldering*--1 to 3 lb.....per lb. 25@29c
3 lb. and larger..... " 23c

CORD.

*Picture*--White Wire--List October 1900.....80&10%
*Sash*--
Baltic Braided Flax...per lb. 22 c
India Hemp, cable laid " 13 c
" " hawser " " 12 c
" " plain " " 15½c
Italian " cable " " 21½c
Russian " " " " 17 c
Samson, white " 31½c
" spot " 30½c
SilverLake, white 7-32 in. " 31 c
" " " 8-32 in. " 31 c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....50%
Williamson's Forged Worm.....50%

COTTERS--SPRING.

All sizes—new list..... 85&20%

COUPLINGS--HOSE.

Brass .....per doz. $1.00
Brass Plated..... " 85

COVERS, WAGON--SEE TENTS.

CRADLES--GRAIN.

Morgan's Grapevine ..per doz.$22 25

CRAYONS--SEE CHALK.

CROW BARS.

Pinch or Wedge Point, per 100 lbs..... $3 40

CUTTERS.

*Meat*--
Enterprise Nos. 5, 10, 12, 22, 32, and 42..... 25%
No. 100, list, $18.00.....40&10%
Nos. 2 and 4..... 35%
Ideal.....per doz. $9.75
Universal....No. 1 2 3
Per doz.....$10.75 $13.00 $18.00
*Pipe*-Stanwoods No. 1 2 3
Each.....$ .85 1.50 4.00
*Slaw and Crout*--
3-knife Crout.....per doz. $9.75
1 " Slaw..... " 1.65
2 " " ..... " 2.25
*Washer*..... " 7.75

DAMPERS—STOVE PIPE.

Standard.....50&10%
American.... .....40&10%

DIES--STOCKS AND

Discount.....40&10%

DIGGERS.

*Post Hole*—
Acme.....per doz. $8.75
Atlas.....per doz. 7.75
Eagle .....per doz. 6 50
Eureka .....per doz. 6.25
Hercules.....per doz. 9.75
Iwan's Split Handle..per doz. $8.00
Iwan's Perfection....per doz. 8.00
Ryan's .....per doz. 17.00

DIGGERS—POST HOLE.

Atlas..... .....per doz. $8.50
Eagle..... " 6.25
Eureka..... " 6.50
Hercules ..... " 10.25
Ryan's..... " 17.00
See also Augers—Post Hole.

DOORS--SCREEN.

⅞ in. 4 panel painted per doz. $ 6.25
1⅛ " " " 7.50
1⅛ in. 3 panel natural pine, fancy.....per doz.. 11.50

DOOR HANGERS—BARN.

Single Flange, D. B. Rail, .....per 100 ft. 1 60
Novelty Check Back, ..... 3 in 4 in 5 in 6 in
Per doz. pairs. $3.60 $3.90 $4.95 $6.25

DRILLS.

*Bit Stock*.....60%&65&5%
*Blacksmith's Twist*.....60%
*Breast*--
Common.....each, $2.25
Millers' Falls..... " 2.10
*Hand*--
Goodell's Automatic--per doz.
No. 01 No. 03 No. 3 No 20
$7.75 $12.50 $14.25 $11.00
Goodell's Single Gear per doz. $16.00
Millers' Falls " " " 12.50
" " Double " " 15.00
*Reciprocating*—
Goodells'.....per doz. $17 00
*Bit Stock*.
Standard List....60&5%@60%@10%

DRIVERS--SCREW.

Hurwood .....40&10%
Standard.....65&10%
Ajax.....70&5%
Champion.....50%
" Pattern.....75&5%
Clark's Interchangeable.. .... 33⅓%
Edison.....60%
Reed's Lightning.....50%
Goodell's Spiral.....50&10&5%
Yankee Ratchet.....50%
" " Spiral.....50&10&5%

ELBOWS.

*Conductor*.....60%
*Adjustable Stove*—In. 5 6 7
Smooth....per doz. $0.95 0.95 1.40
Plan'd..... " 2.10 2.25 3.00
*Corrugated Stove*—In. 5 6 7
Smooth.....per doz. $0.95 .95 1.40
Pol'd..... " 1.70 1.75 2.60
Plan'd..... " 2.60 2.85 3.50
*Four-Piece Stove*—In. 5 6 7
Smooth....per doz. $0.57 .60 .93
Pol'd..... " 1.00 1.05 1.50
Plan'd..... " 1.50 1.70 2.60

EMERY--TURKISH.

Size .....5 lb. pkgs. ½ kegs, kegs.
No. 60 to 150, 5 lb. 6½c 4½c 4½c
Flour..... " 5½c 3½c 3½c

ENAMEL--IRON.

English, ½-pt. cans...per doz. $1.50
Nubian, " " ... " 1.80
O. V. B., " " ... " 1.25
Peerless ..... 1 50

EXTRACTORS--PIG.

See Forceps, Pig.

EYES.

*Bright Wire Screw*—See Goods, B.W.
*Drifting Pick*.....60&10%
*Hooks and*--
Brass.....60&5%
Iron .....65&10%

FASTENERS, STORM SASH.

Moore's.....per doz. $0 80
Schroeder's..... " 1 50
Sensible..... " 1 10

FASTENERS, BLIND.

Zimmerman's.....Net

FILES AND RASPS

Black Diamond.....70&10%
Disston's .....75&10%

FILTERS.

Improved Natural Stone.$2 50@13 50
Subject to large discounts.

FORCEPS—PIG

Barber's.....per do $7 25
Superior..... " 4 75
Whisson's Imp..... .... 6 00

FORKS

*Barley*—
Steel.....60&30%
Wood, 4 tines,$5.50; 6 tines,$6.50 doz
*Coal* .....40%
*Coke* .....40%
*Cottonseed* .....40%
*Hay*—
Diamond, 2 tine.....50, 10&5%
" 3 " .....60&5%
" 4 " .....60½&10%
Golden Eagle, 3 tine .....60½&10%
" " 4 " .....60&1
Digging..... .....60&10%
Scoop .....35%

FORKS—CONTINUED.

*Header—*
Diamond, 2 tine.....67½&10&5¢
" 3 " .....65¢
" 4 " .....65¢
Golden Eagle, 4 tine.....10&10&5¢
*Manure—*
Diamond.....60, 15&2½¢
Golden Eagle.....66⅔&10¢
*Ore*.....40¢
*Spading—*
Diamond.....70&2½¢
Golden Eagle.....70&2½¢

*Hack Saw—* FRAMES
Crown.....per doz., $ 6 25
Miller's Falls..... " 10 00
Star..... " 2 85

FREEZERS—ICE CREAM
*Arctic*—Qts... 1 2 3 4 6
Each.....$1 10 1 30 1 50 1 80 2 30
Qts..... 8 10 12 15
Each.....$2 95 3 80 4 50 5 20
*White Mountain—*
20 qt.—New platform, each...$19.10
25 qt.— " " ... 22.60
25 qt. Sampson Power " ... 42.00
40 qt. " " " ...57.00

GAUGES.
*Butt and Rabbet.*
Stanley R. & L. Co.'s..20&10&2½¢
*Cream Pail*, Fairmont, per doz..$3 75
*Marking, Mortise, etc*.....
.....50&10¢@50&10&5¢
*Saw*—Atkin's sgle. 55c, dbl. 80c pr doz.
*Wire.*
Disston's.....25¢
P. S. & W. Co.'s.....20¢

GIMLETS.
Discount.....40@40&10¢

GLASS—WINDOW.
Single and double strength, all sizes..... 90&10¢

GLASSES—LEVEL.
Stanley R. & L. Co.....50&5¢

*Bulk.* GLUE
B Amber.....per lb 9¾c
A White.....per lb 12½c
H. S. Amber.....per 'b 17 c
*Liquid.*
Eagle.....40 ¢
LePage's—
List "A".....37½¢
List "B".....33⅓¢
List "C".....25 ¢

GOODS.
*Bright Wire*.....90&5¢

GREASE, AXLE.
*Wood Boxes.*
Diamond.....per gr. $5.00
Frazer's..... 9.25
Hub Lightning..... 5.25
Paragon..... 6.75
*Wood Pails.*
Frazer's, 15 lb. 78c, 25 lb. $1.30 each.
Hub Lightning, 15 lb. 52c, 25 lb. 68c each.
*Tin Cans*
Chamellene Graphite.
1 lb. per gross.....$ 9 50
3 lb. per gross..... 25 00
5 lb. per gross..... 37 00

GRIDDLES
*Soapstone*.....40&10¢

GRINDSTONES
*Family*—In..... 7 8 9
Per doz.....$8 25 9 00 10 50
*Loose.*
Per ton.....$20 00@$21 00
*Mounted—*
Ball Bearing..... 1 2 3
Each.....$3 40 3 25 3 15
Common Bearing... 1 2 3
Each.....$2 90 2 70 2 55

HAFTS—AWL
*Brad*—Common.....per doz., $0.18
*Peg—*
Common..... " 21
Patent, plain top..... " 46
" leather top .. " 52
*Sewing—*
Common..... " 21
Patent..... " 52

HALTERS
Jute Rope.....per dc $0 80
Sisal Rope..... " 1 95
Web..... " 2 10
Leather, rope tie..... " 6 25
" leather tie... " 8 25

HAMMERS—HANDLED
*Blacksmiths' Hand*
Maydole's.....40&10¢
*Engineers'—*
Maydole's.....40&10¢
*Farriers'.*
Maydole's.....35&5¢
*Machinists'.*
Maydole's.....40&10¢
*Nail.*
Ajax.....per doz $5 75
Calumet..... " 3 40
Cast.....per doz $1 10@$1 50
Maydole's.....30&7½¢
Vulcan.....35&5¢
*Riveting.*
Maydole's.....35&5¢
*Shoe.*
Cast.....per doz 75c
*Tack.*
All Iron.....per doz $0 35
Pol'd Iron, Hickory hdl " 0 52
Mall. Iron, Inlaid..... " 1 50
Magnetic 1 2 3
Per doz..... 70c 80c 95c
Magazine.....per doz $4 75

HAMMERS—HEAVY.
*Heavy Hammers and Sledges.*
Under 5 lbs.....70&10¢
5 lbs. and over.....75&5¢
*Masons'—*
Single & Double Face.....70&10¢

*Auger.* HANDLES.
Common Ass'd.....per doz $0 36
Peck's Adjustable.... " 2 10
Roger's " .... " 4 15
Ives' " ....per set 1 25
*Axe*.....40¢
*Chisel.*
Hickory, Tanged Firmer, Assorted, 24c; Large, 26c per doz.
Hickory, Socket Firmer, Assorted, 18c; Large, 21c per doz.
Applewood, Tanged Firmer, Assorted, 27c; large, 36c per doz.
Applewood Socket, Firmer, Assorted.....per doz 24c
*Coal Pick*.....40¢
*Drifting Pick*.....40¢
*File*, assorted 13c, large 16c per doz.
*Hammer.*
Adze Eye.....per doz 42c
Blacksmiths'.....per doz 45c@65c
Machinists'..... " 39c@58c
*Hatchet*.....per doz 42c
*Hay and Manure Fork*.....40&10¢
*Hoe and Rake*.....40&5¢
*Saw*, Plain 72c, Varnished 68c per dz.
*Screw Driver*, Assorted 42c, Large 48c per doz.
*Shovel and Spade*.....40¢

*Barn Door*—HANGERS
Cronk's Automobile Loose Axle.....60¢
Cronk's Automobile Roller Bearing.....60&20¢
Cronk's Loose Axle Endless Run.....60&10¢
Cronk's Roller Bearing.....70&5¢
King.....per doz. prs., 5 00
Monarch.....60&10¢
"Never Jump" Hinge.....50&10¢
Peerless, Loose Axle.....60&10¢
Perfection, Roller Bearing..70&5¢
Phœnix, Roller Bearing... 70&5¢
Prouty.....per doz. prs., $5 50
Rival..... " " 3 90
Superb..... " " 6 25
Safety Flexible " " 6 65
Wagner's Adjustable.....70@10¢
Warehouse.....60¢
*Conductor Pipe—*
Iwan's Perfection.....50¢
*Parlor Door—*
Acme.....per set $3 75
Ives' Improved..... " 2 50
Lane's Standard..... " 3 50
" New Model.... " 2 80
Prouty..... " 3 00
Richards'.....40-10&5¢
*Eave Trough—*
Baker's.....per gr., $2 35
Imperial.....35¢
Wire.....35¢

HASPS.
Hinge, Wrought.....70-10&10¢
With Staples—See Staples.

HATCHETS.
Ajax.....40¢
Blood's.....40¢
Cast Claw.....per doz $1 50@$1 75
Cast Shingling.... " ..... 1 20
Duffy's Barrel.....per doz 17 50
Germantown.....35¢
Hammond's.....35¢
Roger's Ideal.....per doz $5 75
Underhill's Star Lath.....40¢
U. S. A.....25¢

HAY RACK BRACKETS.
Wenzlemann's No. 1, per doz...$12 60
" No. 2, " ... 13 20

*Blind.* HINGES.
Clark's Gravity, per doz sets....80c
Parker's.....65¢
Shepherd's Noiseless, for Wood casing.....doz. $1 05
*Gate.*
Clark's, 1 2 3
Hgs & Ltchs, dz.. $2 35 $2 60 $3 60
Hinges Only, " .. 1 70 1 90
Latches Only, " .. 0 70 0 75
Knuckle.....per doz prs $6 00
Leed's..... " sets 6 75
Superior..... " prs 9 25
*Spring.*
American.....35¢
Bommer Bros. Ball B'g Floor...35¢
Bommer Bros. Spring Hinges .40¢
Chicago.....25&5¢
Clover Leaf.....per gro $9
Columbia Dbl. Acting....40&10&5¢
Gem.....25¢
Meal Detachable,....per gro $12 00
New Idea..... " 9 60
Oxford.....20¢
*Wrought Iron.*
Light Strap Hinges....80-5-10&10¢
Heavy Strap Hinges80-20-10-10& 0¢
Light T Hinges.....75-10-5-10&10¢
Heavy T Hinges.....75-5-10&10¢
Extra Heavy T Hinges80-20-10&10¢
Cor. Heavy Strap...80-20-10-10&10¢
Cor Ex Heavy T.....80-20-10&10¢
Hart's Heavy Strap.....50&10¢
Hart's Ex. Heavy T.....50&10¢
*Screw Hook and Strap.*
6 to 12in.....per 100 lbs. $3.65
14 to 20in..... " " 3.40
22 to 36in..... " 3.15
*Screw Hook and Eye.*
⅝in.....per 100 lbs. $6.25
⅝in..... " " 7.25
½in..... " 9.00

HOES.
Garden.....70&10¢
*Grub:*
Ajax.....60¢
Extra.....65&10¢
Hazel.....per doz $5 75
Ladies' and Boys'.....70&12½¢
Mortar.....70, 10&10¢
Planter's Eye.....62½¢
Weed.....66⅔, 10&10¢

*And Eyes.* HOOKS.
Brass.....50&10&5¢
Iron.....65&10¢
*Awning*.....per gro $1 80
*Belt*
Brown's.....70&5¢
Jones'.....65&5¢
*Bench*—See Stops, Bench.
*Box*, In. 6 8 10 12
Doz.. $1 25 $1 60 $1 70 $2 25
Humason & Beckley's...pr dz $2 40
(See Goods, Bright Wire.)
*Bush*
Common Axe Handle.....per doz $7 00@$8 50
Hamilton Pattern.....per doz $7 25
*Chain*—In. ¼&5-16 ⅜ 7-16 ½
Per 100 $7 50-7 75 $9 50 $11 25 $12 00
*Clothes Line.*
Japanned.....per doz 21c@22c
Galvanized..... " 35c
*Coat and Hat.*
Cast Iron.....per gro 72c@$1 00
Gem Wire.....70&10¢
*Conductor.*
Malleable.....50&10¢@50&10&5¢
Wrought.....40&10¢@50¢
*Corn.*
Common, unpolished, per doz. $1 30
" polished... " 1 70
"Cut Easy," .....per doz. 2 65
Clyde's, ..... " 2 40
Brooke's..... " 2 65
*Gate.*—See Goods, Bright Wire.
*Grass.*
Common, Nos. 2 3 1
Per doz..... $1 75 $1 80 $1 90
German.....per doz 1 90
Little Giant..... " 3 10
Wood's..... " 1 30
*Hammock.*
With Plate..... " 31c
With Screw..... " 31c
*Lambrequin* or Drapery...per gro 21c
*Picture*.....50¢@50&10¢
*Potato and Manure*.....60&15¢
*Screw*, Brass.....80&20¢
(See Goods, Bright Wire.)
*Seat Spring*.....per lb 5½c

HOOPS—TUB.
Ever Ready..... per case $1 65

HOSE—GARDEN.
3 ply ¾ in. 35 lb. pressure per ft..5½c
3 " ¾ " 50 " " " ..7½c
3 " ⅞ " 60 " " " ..7 c
3 " ¾ " 60 " " " ..8½c
4 " ⅞ " 80 " " " ..8½c
4 " ¾ " 80 " " " . 10 c
6 " ¾ " 125 " " " .11½c
8 " ¾ " 150 " " " ..31 c
Cotton ¾ in. 75 lb. pressure per.. c
" ¾ " 150 " " " .9c

*Ross.* HUSKERS.
Nos. E A B P
Dz. $1 85 $2 00 $1 95 Gr. $5 90 $5 20
Nos. 2000 3000 4000 O OX
Gr. $3 10 $6 75 Dz. $1 15 $2 20 $1 65
*Brinkerhoff's*.....per gr 14 50
*Harrington*.....per gr 4 20
*Ideal*—Nos. 102 101 100
Per doz..... $1 35 $2 50 $2 75
*Johnson's*.....per gro 7 75

IRON.
See Metals—First column.

IRONS.
*Curling.*
Common.....per doz 33c@48c
Princess.....per doz $0 60
Yale..... " 0 84
Oxford..... " 1 10
Ruby..... " 1 50
Tourist, Folding..... " 0 90
*Pinking*..... " 0 60
*Plane.*
Wood Bench.....20&5¢
Stanley R. & L. Co. (new list)25&5¢
*Sad.*
Charcoal.....per doz $10 75
Common, Polished, per 100 lbs 3 50
" Nickel Plated, " 4 75
Chinese Polishing.....per doz 7 60
Laundry, No. 1, $5 75; No. 2, $6 25 per doz.
Mrs. Pott's.
No. 50 J, Enterprise...per set 79c
No. 55 J, " ... " 76c
No. 50 T, " ... " 82c
No. 55 T, " ... " 79c
No. 50, Howells'..... " 72c
No. 55, " ..... " 69c
Tailors' Sad.....per lb 4¼c
" Geese..... " 4¼c
*Tuyere.*
Single Duck Nest.....per doz $5 25
Double " " ..... " 6 25
Sutton.....each 2 60

JACKS.
*Locomotive*.....75&5¢
*Wagon.*
Meeker's.....per doz $1 25
Miller's No. 2..... " 7
Winner..... " 7

KETTLES.
Brass.....20¢
Caldron.....50¢
Copper.....per lb 27½c
Maslin.....66⅔¢
Sugar.....50&5¢

KNIVES.
*Beet Topping.*
Clyde, 9-in. Scimiter Blade.dz $4 25
" 12-in. Straight " .dz 2 50
*Cooper's Hoop*.....15¢
*Corn.*
Acorn.....per doz $2 65
Ajax..... " 2 25
Clipper, Light, $1 75; Heavy, $1 90 per doz.
Disston's.....per doz $3 15
Easy..... " 7 75
Rugged Razor..... " 2 40
H. S. Earle's..... " 3 15
*Drawing.*
Standard.....70¢
Adjustable.....20¢
Barton's Carpenters'.....10¢
" Folding Handle....25&5¢
*Hay.*
American, Sickle Edge...doz $10 25
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 25
Iwan's Sickle Edge..... 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 5 75
Wadsworth's Sp'r Point. " 8 75
*Hedge.*
Ajax, Heavy, $5 75; E Heavy, $7 75 per doz.
*Mincing.*
Common, Single.....per doz 45c
" Double..... " 65c
Streeter, 4 Blade, $1 30; 6 Blade, $1 90 per doz.
*Putty.*
Common.....per doz 84c
Goodell's.....per doz $1 30@$1 80
Russell's..... " 1 75@ 2 25

KNOBS.
*Door*, Mineral.....per doz 0 70
Porcelain..... " 0 80
Jet..... " 0 80

LADDERS.
*Common Long*.....per ft 9c@14c
*Extension*.....per ft 12c
*Step.*
Common..... " 7c
" With Shelf, add 10c.
I X L.....per ft 17c
Miller's Household. per ft 13c@15c

LANTERNS.
*Bull's Eye Police.*
3-in Flash Light.....per doz $6 00
2¾-in Regular..... " 4 00
3-in Regular..... " 5 00
*Tubular*, Berger.....40&10&5¢

LEADERS—CATTLE.
Nos. 1 2 3
Per doz... $0 70 $0 85 $2 75

LEATHER—LACE.
*Cut*.....50&10¢
*Sides*, Ex. Quality.....per sq ft 30c

LEATHERS—PUMP.
Valve and Plunger.....50¢

LIFTERS.
*Stove Cover.*
Japanned.....per gro $2 75
Coppered..... " 3 60
Chilkoot..... " 4 50
Devore's..... " 5 50
Zero..... " 3 90
*Transom*, Payson's.....70&10¢

LINES.
*Chalk*, Twisted in 20-ft hanks.
Nos. 15 14 13 12 11
Per doz.. 10c 12c 17c 22c 29c
Twisted in 50-ft balls.
Nos. 1 2 3 4
Per doz.... 24c 30c 36c 44c
Braided in 20-ft hanks.
Nos. 0 1 2
Per doz..... 23c 26c 32c
Masons', in 100-ft hanks...doz $1 00
*Clothes.*
60-ft Jute.....per doz $0 95
72-ft " ..... " 1 10
60-ft Sisal..... " 1 60
72-ft " ..... " 2 10
60-ft Cotton..... " 1 35
50-ft Braided Cotton..... 1 10

LINING—STOVE.
In Bricks.....per crate 43c

MACHINES.
*Boring* Without Augers. With Augers.
Ajax.....per doz $5 25 $6 75
Angular.. " 3 25 5 00
Boss..... " 4 50 5 00
Upright.. " 3 90 4 00
*Leather Riveting.*
Chicago, Pomeroy....per doz $9 75
Excelsior..... " 2 50
Handy..... " 2 10
Little Giant..... " 3 10
Pony, Pomeroy..... " 8 00
*Washing.*
Boss. 1 2 5 3
Per doz.. $57 00 $63 00 $69 00 $80 00
Globe, No. 1.....per doz $56 50
O K Rotary..... " 55 50
Round Wayne..... " 26 50
U. S. Steel..... " 60 00

MALLETS.
*Carpenters'.*
Fibre Head, Small. Med. Large.
Per doz..... $5 00 $5 75 $6 75
Round Hickory.....per doz $1 75
" Lignumvitæ.... " 2 75
Square Hickory..... " 1 75
" Lignumvitæ.. " 3 25
*Tinners'.*
Applewood..... " 1 60
Hickory..... " 85
Hickory Sheet Iron. " 80

*Door.* MATS.
National Rigid ..... 50, 10&5%
Queen Flexible ..... 50%
*Stove.*
Standrd Quality .....per gross $3 75
Best " (Pure) " 4 75
Wire Covered Asbestos, Ex.
Heavy .....per doz 1 00

MATTOCKS.

Ajax ..... 65&10%
Extra ..... 60%

MAULS.

Iron, lbs. 10 13 16 18 21
Per doz. $3 15 $3 85 $4 45 4 75 $5 25
Wood face, lbs. 10 11 13
Per doz ..... $4 75 $5 00 $5 25
*Wood Choppers'.*
Lake Super'r & Oregon Pat. 70&10%

MEASURES.

| | ½ pk | 1 pk | ¼ bu |
|---|---|---|---|
| Galvanized..per dz | | | $3 65 |
| Japanned .. " | $1 40 | 2 10 | $2 60 |

*Babbitt.* METAL.
Alm ..... per lb 8¾c
Best ..... " 23c
Common, No. 4 ..... " 6½c
Copper Mixed ..... " 18½c
Magnolia Metal ..... " 19c
Tony ..... " 10¼c
See Metals—In first column.

MICA.

First Quality ..... 40, 10&5%
Second Quality ..... 60%

MILLS—COFFEE.

Enterprise ..... 35&5%
National ..... 30%
Parker ..... 50&10%@60%

MOPS.

*Erie* .....per doz $3 15
*Handled Cotton.*

| Lbs. | ¾ | 1 | 1¼ | 2 |
|---|---|---|---|---|
| Per doz.. | $2 00 | $2 35 | $2 65 | $3 25 |

MOWERS—LAWN.
*Ball-Bearing.*

| In. | 15 | 17 | 19 | 21 |
|---|---|---|---|---|
| Each..... | $7 50 | $8 50 | $9 50 | $10 50 |

*Champion.*

| In. | 12 | 14 | 16 | 18 | 20 |
|---|---|---|---|---|---|
| Ea.. | $2 30 | $2 35 | $2 35 | $2 65 | $2 75 |

*Champion, High Chief.*

| In. | 16 | 18 | 20 |
|---|---|---|---|
| Each..... | $4 00 | $4 50 | $5 00 |

*Cheap Grades.*

| In. | 12 | 14 | 16 | 18 |
|---|---|---|---|---|
| Each..... | $2 10 | $2 10 | $2 10 | $2 20 |

*Clipper* .....50&10&10%
*Girard*, in. 14 16
Each .... $3 25 $3 50
*Philadelphia.*
All Styles Except A & E 60&10&10%
Style A .....50&10%
Style E, High Wheel..60,10,10&10%
Drevels .....50%
All Day .....Net Price

*Horse Shoe.* NAILS.
Ausable .....50%
Capewell .....10%
Perfect .....40&5%
Putnam ..... 10-5%
Star .....35%
*Picture.*
Brass Head .....40&10%
Judd's .....40&10%
*Brads* .....80&10&10%
*Furniture* .....40%
*Wire.*
Small Lots ..... $2.25
Carload " ..... 2 15
Cement Coated ..... 2 10

NETTING—POULTRY.

Galvanized Before Weaving.80&20
" After Weaving... 80&15
Cut Pieces ..... 65&5%

NIPPERS.

*Bud Cutting.*
P. S. & W. Co. ..... 40&5%
Stubb's Pattern ..... 40&10&5%
*Hoof.*
Heller's ..... 40&5%
P. S. & W. Co. ..... 40&10%
V. & B ..... 40-5%
*Hose.* NOZZLES.
Genuine Boston .....per doz $3 15
Genuine Gem ..... " 3 15
Magic ..... " 3 40

NUTS—HOT PRESSED.

*Square Blank.*

| In. | ¼ | ⅜ | ½ | ⅝ | ¾ | ⅞ | 1 |
|---|---|---|---|---|---|---|---|
| Lb. | 9c | 6c | 4c | 3½c | 3¼c | 3⅛c | 3c |

*Square Tapped.*

| In. | ¼ | ⅜ | ½ | ⅝ | ¾ |
|---|---|---|---|---|---|
| Lb. | 11¾ | 7½ | 5¼ | 4½ | 4¼ |

For 5 lb. boxes add ⅛c per lb. to above prices.

OILERS.

Chase Pattern.
Brass and Copper ..... 35%
Zinc ..... 60%
*Engineers'.*
Cannon ..... 10%
Tin .....per doz $3 00@$3 00
*Machine.*
Ajax .....per doz $0 80
Copper Plated Steel... " 1 50
Malleable Iron ..... 40&10&5%
Tin .....per doz 55c@56c

OPENERS.

| *Box*, in. | 10 | 12 | 14 |
|---|---|---|---|
| Flat....per doz | $2 85 | $3 60 | $4 15 |
| Round.. " | 2 10 | 2 25 | 2 75 |

*Can.*
Delmonico ..... per doz 1 30
Never Slip ..... " 0 65
*Crate*, V. & B ..... " 5 75

OUTFITS—COBBLING.

Combination ..... .....per doz $11 50
Economical .... ..... " 4 90
Family ..... " 10 00

PADLOCKS.

Standard Wrought ..... 70&10&5%
Champion ..... 50%
Eureka ..... 40&10&5%
Yale ..... 60&5%
*Cream.* PAILS.
14-qt., Without Ga.... per doz $2 75
20-qt., " " .... " 3 25
20-qt., With Gauge.... " 4 20
*Sap*, 10-qt., Galvanized, $1 60; 12-qt., Galvanized, $1 85 per doz.
*Stock*, Galvanized.

| Quarts. | 14 | 16 | 18 | 20 |
|---|---|---|---|---|
| Per doz... | $3 75 | $4 00 | $4 65 | $5 25 |

*Water*, Galvd, qts. 10 12 14
Per doz ..... $1 75 $2 00 $2 35
*Wood.*
Cable, 2-Hoop, $1 90; 3-Hoop, $2 10 per doz.
Cedar, 3-Hoop, $2 85 per doz.
Standard, 2-Hoop, $1 65; 3-Hoop, $1 85 per doz.

PANS.

*Dripping* ..... 50&10&5%
*Fry*, Common ..... 60&10&5%
Acme ..... 66⅔&5%
*Roasting.*
Brownie ..... Each 30c@37c
L. & H ..... " 58c@80c
*Building.* PAPER.
Plain .....per 100 lbs $1 15
Tarred ..... " 1 25
Tarred Felt ..... " 1 80
Diamond A, Red Rosin.pr roll 0 60
Leader, Red Rosin ..... " 0 45
*Sand and Emery.*
Ajax ..... 50&10%
B. & A ..... 50 & 5%
*Wrapping.*
Grecian Express .....per lb 3¾c
Rag ..... " 2½c
*Apple.* PARERS.
Bay State .....per doz $13 00
Reading ..... " 6 75
Turntable ..... " 6 00
White Mountain ..... " 5 25
*Potato.*
Goodsell's Saratoga..per doz. $6 50
White Mountain ..... " 6 00

PICKS

Adze Eye Ore ..... 65&10%
Drifting and Poll Picks ..... 60&10%
Ajax Railroad ..... 60%
Extra Railroad ..... 65&10%
Surface ..... 65%

PINCHERS.

Carpenters', wrt. iron, pol. steel jaws ..... 30%
Blacksmiths' ..... 50%
P. S. & W ..... 40&10&5%
*Clothes.* PINS.
Common .....per gr..$0 12
Hoyt's ..... " .. 30
U. S ..... " .. 70
*Picket.*
Fluted 15 in .....per doz..$0 70
" 21 in ..... " .. 1 60
Spiral ..... " .. 1 90

PIPE.

| *Conductor.* | Nested | Not nested |
|---|---|---|
| Eastern, A... | 75&7½% | 75&2½% |
| Eastern, B. | 75&10&2½% | 75&7½% |
| Central ..... | 75&7½% | 75% |
| Southwst'n.. | 70-&7½% | 70&2½% |
| Texas ..... | 70&7½% | 70&2½% |
| Mo. River.... | 70&7½% | 75% |
| Southern ..... | 70&10% | 70&5% |

*Lead.*
Full coils ..... per lb... 6
Cut " ..... " .. 6½
*Stove.*

| Acme—In. | 5 | 6 | 7 |
|---|---|---|---|
| Smooth, per jt. | 10½c | 10½c | 12½c |
| Planished, " .. | 22c | 23c | 42 c |
| Peerless--Smooth.. | 8½c | 9c | 11½c |
| Polished.. | 16c | 18c | 22 c |
| Planished | 28c | 31c | 40 c |
| Made-up—In. | 5 | 6 | 7 |
| Smooth..... | 8¾c | 9c | 12 c |

7 to 6 in. Smooth Tapers, pr jt..14c
6 in, Smooth T's ..... " ..30c
7 to 6 in. Planished Tapers ..... 45c
*Wrought Iron Gas Pipe.*
⅛@⅜-in., black .....discount, 62½%
⅜ " ..... 65%
⅜-in. to 4-in, black .... " 70&5%
4½ " 6 " .... " 70&5%
7 " 12 " .... " 65%
⅛@⅜" galvanized " 50%
⅜ " " " 55%
⅜ " to 4 " " 57½%
4½ " " 6 " " 57½%
7 " " 12 " " 52½%

PLANES.

Siegley Iron Bench ..... 50&10%

PLANTERS.

*Corn,* Monitor .....per doz..$7 75
Triumph ..... " .. 6 00
*Potato*
Acme .....per doz.. $6 25
Challenge ..... " .. 10 75
*Fencing.*
Cronk's .....per doz..$9 25
Farmers' Choice ..... " .. 8 75
Russell's ..... " .. 8 65
*Flat and Round Nose.*
Bernard's ..... 30%
German ..... 50%
Lodi ..... 40%
Paragon ..... 40&10%
P. S. & W. Co ..... 60%
*Gas*—In. 8 10 12
Per doz ..... $3.10 $4.00 $4.90

PLIERS.

*Button's*--In. 4½ 6 8 10
Per doz.... $2.60 $3.10 $3.90 $5.20
*Button' Pattern.*
In. 4½ 6 8 10
Per doz. .. $2.35 $2.50 $3.45 $4.40
*Cutting.*
Bernard's ..... 30%
Cronk's Impr'vd Button Pliers.75%
Cronk's Linemans No. 80 ..... 40%
Cronk's Stubbs Pattern .... 50&10%
Cronk's No. 1 ..... 60&10%
Cronk's Staple Puller Pliers..$9 00
Lodi ..... 40&10&5%
4 Tube, revolving.... " .. 5 25
*Tinners'.*
Hollow .....
Solid ..... each..5½c

PLUMBS AND LEVELS.

Common ..... 75%@75&10%
Cook's ..... 40%
Davis' Iron ..... 30%
Davis' Inclinometer ..... 20%
*Stanley's*

| Nos. | 00S | 0S | 2S | 3S |
|---|---|---|---|---|
| Per doz.. | $4.50 | $5.20 | $7.60 | $8.65 |
| Nos. | 30 | 25 | 50 | 35 |
| Per doz. | $13.00 | $17.50 | $17.50 | $12.35 |

POINTS.

Drive Well Points ..... 80&10%

POKERS—STOVE.

Wr't Iron, str't or bent, per doz.$0 50
Wr't Iron, wood hand'ls " 75
Nickel pl'td. coil hdl's.. " 70

POKES--ANIMAL.

American .....per doz..... $2 60
Brown's, wr't steel " ..$5 25@6 25
Eagle ..... " ..... $4 25
Success ..... " ..... 2 60

POLES--FISHING.

*Bamboo*

| Ft. | 12 | 14 | 16 | 18 | 20 |
|---|---|---|---|---|---|
| Pr 100.. | $2.75 | $3.40 | $4.75 | $6.00 | $7.75 |

POLISH.

*Metal.*
Pride of the Bar..... " .. 1 60
Putz Cream.

| Pts. | 1-6 | ½ | ⅓ |
|---|---|---|---|
| Per doz..... | $0.84 | $1.35 | $1.80 |

| Pts. | 1 | 2 | 4 | 8 |
|---|---|---|---|---|
| Per doz. | $3.60 | $6.00 | $9.00 | $18.00 |

White Silk, half pints, per doz.$3.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine

| Pts. | 1-6 | ½ | 1 | 2 |
|---|---|---|---|---|
| Per doz... | $0.68 | $1.30 | $2.15 | $3.00 |

*Shoe.*
M. D. C. ..... per doz..36c@50c
F. C. O. ..... " .....40c
T. M ..... " 50c@$1 25
Imperial ..... per gr..... $5 00
*Stove.*
Black Eagle, 1 lb cans, prgr..$15 00
Black Silk—
5 lb. pail ..... 70c
Paste, 5 oz. cans per doz.....$1.00
Paste, ½ lb. cans, per doz... 1.00
Black and Japanned—
Liquid, ½ pint cans per doz. 1.00
Liquid, 5 oz. cans per doz.... 75c
Steel Range Gloss per doz.... 1.75
Blackene, 1 lb cans.....pr gr.. 13 00
Black Jack, ¼ lb cans. " .. 9 00
Dixon's Carb. of Iron. " .. 5 75
Nickel Plate ..... " .. 4 50

POPPERS, CORN.

Round or Square, 1 qt. per doz., $5@95c
Square, 1½ qt. .....per doz., $1 00
Square, 2 qt. .....per doz., 1 25
1 qt. reversible .....per doz., 1 50

POTS—FIRE.

Bernz ..... each..$3 85
Clayton & Lambert's, each, $4 75@6 25
Gate City ..... each.. 6 25
Gem ..... " .. 6 75

POWDER.

See Ammunition.

PRESSES—FRUIT AND JELLY.

Enterprise Manufacturing Co... 25%
Henis .....per doz. $3 10

PRUNERS.

Disston's Pole.....per doz..$7 50
Henry's Improved..per doz..65&10%
Water's Improved. " 70, 10&5%

PULLERS.

*Cork.*
Modern ..... each..$2 60
Quick and Easy..... " .. 2 90
*Nail.*
Giant .....per doz..$9 00@10 50
Giant Pattern. " .. 00
*Tack*--Giant .... " .. 60

PULLEYS.

*Awning*--Jap'd..... 40&5% to 35&5%
*Clothes Line* ..... 20&10%
*Hay Fork.*
Iron Wheel, 5 in .... per doz..$1 85
Wood Wheel, 6 in ... " .. 1 80
Wood Wheel, 6 in... pass knot..... " .. 2 25
*Hot House*--Jap'd ..... 30&5%
*Screw*..... " ..... 30&5%
*Side*..... " ..... 30&5%
*Sash.*
Chicago .....per doz..$0 29
Clark's ..... " .. 42
Common Sense, 2 in.. " .. 26
" Pattern, 2 in.. " .. 30
Empire ..... " .. 34
Ideal ..... " .. 22

PUMPS

*Pitcher Spout.*

| Nos. | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Each..... | .90 | $1.00 | 1.10 | $1.40 |

PLATES--TIN.

See Metals in Column 1.

*Spray.*
Blizzard .....per doz..$14 25
Cyclone, tin ..... " .. 3 90
" copper..... " .. 6 75
Daisy ..... " .. 8 75
Little Giant ..... each.. 3 40

PUNCHES.

*Conductors'*, No. 22.... per doz..$3
*Machine* .....per lb..
*Saddlers'.*
Common .....per doz..60c@70c
Good ..... " ..72c@84c

PUTTY.

*In Bladders.*
Strictly pure .....per 100 lbs. $2 35
Commercial ..... " " 2 10

RAIL.

*Barn Door.*
Light Wrought .. .....per ft. 3c
Safety ..... " 4½c
Single Flange ..... " 1¾c
Smith's Wro't Bracket—plain 3½c
Smith's Special ..... 4½c
Smith's "Never Jump" .....11c 50%
Smith's Plain Steel ..... 30%
Smith's Milled Steel ..... 4½c
*Sliding Door.*
Painted iron .....per ft. 4½c
Bronzed wr't iron..... " 8½c

RAKES.

*Coal* or Road .....per doz. $6.50
*Garden.*
Cronk's Champion ..... 70%
Cronk's Victor.. ..... 75%
Steel, braced ..... 75&15%
Steel, bow ..... 70%
Malleable iron, heavy ..... 70%
*Hay*—Wood .....per doz. $1 40@2 00
*Lawn*—Wood.
Common .....per doz. $2 50
Automatic ..... " 6 00
New Lawn Queen .... " 3 60
Jumbo, 36 teeth ..... " 6 50

RASPS—See Files.

REGISTERS.

List July 1, 1903.

Black and White Japanned .70 to75%
Nickel Plated ..... 70 to75%
Electroplated, Brass, Bronze or Copper ..... 70&75%

RINGS

*and Ringers*—Hog.
Blair's Rings .....per doz. 60c
Blair's Ringers ..... " 84c
Brown's Rings ..... " 65c
Brown's Ringers ..... " 90c
Champion Rings ..... " $2 25
Champion Ringers ..... " 1 70
Hill's Rings ..... " 48c
Hill's Ringers ..... "70c@95c
Mazor Rings ..... " 80c
Mazor Ringers ..... " $1 15
Perfect Rings ..... " 84c
Perfect Ringers ..... " $1 05
Wolverine Rings ..... " 1 50
Wolverine Ringers .... " 70c
*Bull.*

| Copper | 2 in. | 2½ in | 3 in |
|---|---|---|---|
| Per Dozen | $1 25 | | 1 70 |
| Rea's Impro'd Self Piercing copper, pr d'z $1 50 | 1 75 | | 2 00 |
| Steel, per doz | $.95 | | 1 05 |
| Nickel Plated | 1 35 | | |

*Fruit Jar*—White .....per lb. 30c
*Key.*
Split, round .....per doz. 1
Split, square ..... " 22c
Ball, round ..... " 22c

RIVETS.

*and Burrs.*
Copper Belt ..... 50&10&5%
Coppered Iron ..... 75%
Tinners' ..... 55%@10%
*Hame* .....per lb.
*Slotted Clinch* .....per doz. 40c@45c
*Tubular*—Nos. 1 and 2, assorted sizes .....per doz. 45c

ROPE.

Per lb.

*Manila*, 7-16 inch diameter and larger rates ..... 11½c
*Sisal*, 7-16 in. and larger..... 8½c
*Cotton.*
¼ and 5-16-in. on reels. per lb. 13½c
¼ and 5-16-in. in coils... " 14c

RULES.

Boxwood ..... 60%
Ivory ..... 35&5%

SASH WEIGHTS.

Per ton, f.o.b. Chicago ..... $35.00

SAWS.

*Back.*
Disston's ..... 25&7½%
Jackson's ..... 25&7½%
*Butchers'*—Disston's ..... 25&7½%
*Circular.*
Disston's ..... 50%
Hiles' ..... 50-10%
*Compass.*
Common .....per doz. $1 35@1 60
Disston's ..... 25&7½%
*Cross-Cut.*
Atkin's ..... 40%
Disston's ..... 40&10% &50%
Pocahontas Bit ..... per ft. 39c
Pocahontas, Blued ..... " 41c
*Dehorning.*
Atkins' .....per doz. $5 50
Disston's ..... " 5 75
*Hack.*
Disston's ..... 25½%
Keystone ..... 33⅓%
Sterling Hack Saw Blades..... 25%
Sterling Hack Saw Frames.... 30%

FORKS—CONTINUED.

*Header—*
Diamond, 2 tine.....67½&10&5¢
" 3 " .....65¢
" 4 " .....65¢
Golden Eagle, 4 tine.....10&10&5¢
*Manure—*
Diamond.....60, 15&2½¢
Golden Eagle .....60¾&10¢
*Ore*.....40¢
*Spading—*
Diamond .....70&2½¢
Golden Eagle.....70&2½¢
*Hack Saw—* FRAMES
Crown.....per doz., $ 6 25
Miller's Falls..... " 10 00
Star..... " 2 85

FREEZERS—ICE CREAM

*Arctic*—Qts... 1 2 3 4 6
Each.....$1 10 1 30 1 50 1 80 2 30
Qts..... 8 10 12 15
Each.....$2 95 3 80 4 50 5 20
*White Mountain—*
20 qt.—New platform, each...$19.10
25 qt.— " " " ... 22.60
25 qt. Sampson Power " ... 42.00
40 qt. " " " ...57.00

GAUGES.

*Butt and Rabbet.*
Stanley R. & L. Co.'s..20&10&2½¢
*Cream Pail*, Fairmont, per doz..$3 75
*Marking, Mortise, etc*.....
.... .....50&10¢@50&10&5¢
*Saw*—Atkin's agle. 55c, dbl. 80c pr doz.
*Wire.*
Disston's.....25¢
P. S. & W. Co.'s.....20¢

GIMLETS.

Discount.....40@40&10¢

GLASS—WINDOW.

Single and double strength, all sizes..... 90&10¢

GLASSES—LEVEL.

Stanley R. & L. Co.....50&5¢

GLUE

*Bulk.*
B Amber .....per lb 9¾c
A White.....per lb 12½c
H. S. Amber.....per 'b 17 c
*Liquid.*
Eagle .....40 ¢
LePage's—
List "A".....37½¢
List "B".....33⅓¢
List "C".....25 ¢

GOODS.

*Bright Wire*.....90&5¢

GREASE, AXLE.

*Wood Boxes.*
Diamond.....per gr. $5.00
Frazer's..... 9.25
Hub Lightning..... 5.25
Paragon..... 6.75
*Wood Pails.*
Frazer's, 15 lb. 78c, 25 lb. $1.30 each.
Hub Lightning, 15 lb. 52c, 25 lb. 85c each.
*Tin Cans*
Chamellene Graphite.
1 lb. per gross.....$ 9 50
3 lb. per gross..... 25 00
5 lb. per gross..... 37 00

GRIDDLES

*Soapstone* .....40&10¢

GRINDSTONES

*Family*—In..... 7 8 9
Per doz .....$8 25 9 00 10 50
*Loose.*
Per ton .....$20 00@$21 00
*Mounted—*
Ball Bearing..... 1 2 3
Each .....$3 40 3 25 3 15
Common Bearing.. 1 2 3
Each .....$2 90 2 70 2 55

HAFTS—AWL

*Brad*—Common.....per doz., $0.18
*Peg—*
Common..... " 21
Patent, plain top..... " 46
" leather top .. " 52
*Sewing—*
Common..... " 21
Patent..... " 52

HALTERS

Jute Rope.....per dc $0 80
Sisal Rope..... " 1 95
Web ..... " 2 10
Leather, rope tie..... " 6 25
" leather tie... " 8 25

HAMMERS—HANDLED

*Blacksmiths' Hand*
Maydole's .....40&10¢
*Engineers'—*
Maydole's .....40&10¢
*Farriers'.*
Maydole's .....35&5¢
*Machinists'.*
Maydole's .....40&10¢
*Nail.*
Ajax.....per doz $5 75
Calumet..... " 3 40
Cast.....per doz $1 10@$1 50
Maydole's .....30&7½¢
Vulcan .....35&5¢
*Riveting.*
Maydole's.....35&5¢
*Shoe.*
Cast.....per doz 75c
*Tack.*
All Iron .....per doz $0 35
Pol'd Iron, Hickory hdl " 0 53
Mall. Iron, Inlaid..... " 1 50
Magnetic 1 2 3
Per doz..... 70c 80c 95c
Magazine.....per doz $4 75

HAMMERS—HEAVY.

*Heavy Hammers and Sledges.*
Under 5 lbs.....70&10¢
5 lbs. and over .....75&5¢
*Masons'—*
Single & Double Face.....70&10¢
*Auger.* HANDLES.
Common Ass'd.....per doz $0 36
Peck's Adjustable.... " 2 10
Roger's " .... " 4 15
Ives' " ....per set 1 25
*Axe*.....40¢
*Chisel.*
Hickory, Tanged Firmer, Assorted, 24c; Large, 26c per doz.
Hickory, Socket Firmer, Assorted, 18c; Large, 21c per doz.
Applewood, Tanged Firmer, Assorted, 27c; large, 36c per doz.
Applewood Socket, Firmer, Assorted.....per doz 24c
*Coal Pick*.....40¢
*Drifting Pick*.....40¢
*File*, assorted 13c, large 16c per doz.
*Hammer.*
Adze Eye.....per doz 42c
Blacksmiths'.....per doz 45c@65c
Machinists'..... " 39c@58c
*Hatchet*.....per doz 42c
*Hay and Manure Fork*.....40&10¢
*Hoe and Rake*.....40&5¢
*Saw*, Plain 73c, Varnished 68c per dz.
*Screw Driver*, Assorted 42c, Large 48c per doz.
*Shovel and Spade* .....40¢

*Barn Door*—HANGERS

Cronk's Automobile Loose Axle.....60¢
Cronk's Automobile Roller Bearing.....60&20¢
Cronk's Loose Axle Endless Run .....60&10¢
Cronk's Roller Bearing .....70&5¢
King .....per doz. prs., 5 00
Monarch .....60&10¢
"Never Jump" Hinge.....50&10¢
Peerless, Loose Axle.....60&10¢
Perfection, Roller Bearing..70&5¢
Phœnix, Roller Bearing... 70&5¢
Prouty .....per doz. prs., $5 50
Rival..... " " 3 90
Superb ..... " " 6 25
Safety Flexible " " 6 65
Wagner's Adjustable.....70@10¢
Warehouse .....60¢
*Conductor Pipe—*
Iwan's Perfection.....50¢
*Parlor Door—*
Acme.....per set $3 75
Ives' Improved ..... " 2 50
Lane's Standard..... " 3 50
" New Model.... " 2 80
Prouty..... " 3 00
Richards'.....40-10&5¢
*Eave Trough—*
Baker's.....per gr., $2 35
Imperial .....35¢
Wire .....35¢

HASPS.

Hinge, Wrought.....70-10&10¢
With Staples—See Staples.

HATCHETS.

Ajax .....40¢
Blood's.....40¢
Cast Claw.....per doz $1 50@$1 75
Cast Shingling.... " ..... 1 20
Duffy's Barrel.....per doz 17 50
Germantown .....35¢
Hammond's .....35¢
Roger's Ideal.....per doz $5 75
Underhill's Star Lath.....40¢
U. S. A.....25¢

HAY RACK BRACKETS.

Wenzlemann's No. 1, per doz...$12 60
" No. 2, " ... 13 20

*Blind.* HINGES.
Clark's Gravity, per doz sets....80c
Parker's.....65¢
Shepherd's Noiseless, for Wood casing.....doz. $1 05
*Gate.*
Clark's, 1 2 3
Hgs & Ltchs, dz.. $2 35 $2 60 $3 60
Hinges Only, " .. 1 70 1 90
Latches Only," .. 0 70 0 75
Knuckle.....per doz prs $6 00
Leed's..... " sets 6 75
Superior ..... " prs 9 25
*Spring.*
American.....25¢
Bommer Bros. Ball B'g Floor ...35¢
Bommer Bros. Spring Hinges .40¢
Chicago.....25&5¢
Clover Leaf.....per gro $9
Columbia Dbl. Acting....40&10&5¢
Gem .....25¢
Ideal Detachable,....per gro $12 00
New Idea ..... " 9 60
Oxford.....20¢
*Wrought Iron.*
Light Strap Hinges ....80-5-10&10¢
Heavy Strap Hinges80-20-10-10& 0¢
Light T Hinges.....75-10-5-10&10¢
Heavy T Hinges.....75-5-10&10¢
Extra Heavy T Hinges80-20-10&10¢
Cor. Heavy Strap ...80-20-10-10&10¢
Cor Ex Heavy T ....80-20-10&10¢
Hart's Heavy Strap .....50&10¢
Hart's Ex. Heavy T.....50&10¢
*Screw Hook and Strap.*
6 to 12in.....per 100 lbs. $3.65
14 to 20in ..... " " 3.40
22 to 36in ..... " 3.15
*Screw Hook and Eye.*
¾in .....per 100 lbs. $6.25
⅝in ..... " " 7.25
½in ..... " 9.00

HOES.

Garden.....70&10¢
*Grub:*
Ajax .....60¢
Extra..... ....65&10¢
Hazel.....per doz $5 75
Ladies' and Boys'.....70&12½¢
Mortar.....70, 10&10¢
Planter's Eye.....62½¢
Weed .....66⅔, 10&10¢

HOOKS.

*And Eyes.*
Brass .....50&10&5¢
Iron.....65&10¢
*Awning*.....per gro $1 80
*Belt*
Brown's .....70&5¢
Jones' .....65&5¢
*Bench*—See Stops, Bench.
*Box*, In. 6 8 10 12
Doz.. $1 25 $1 60 $1 70 $2 25
Humason & Beckley's...pr dz $2 40
(See Goods, Bright Wire.)
*Bush*
Common Axe Handle .....per doz $7 00@$8 50
Hamilton Pattern.....per doz $7 25
*Chain*—In. ¼&5-16 ⅜ 7-16 ½
Per 100 $7 50-7 75 $9 50 $11 25 $12 00
*Clothes Line.*
Japanned.....per doz 21c@22c
Galvanized..... " 35c
*Coat and Hat.*
Cast Iron.....per gro 72c@$1 00
Gem Wire.....70&10¢
*Conductor.*
Malleable.....50&10¢@50&10&5¢
Wrought.....40&10¢@50¢
*Corn.*
Common, unpolished, per doz. $1 30
" polished... " 1 70
"Cut Easy," .....per doz. 2 65
Clyde's, ..... " 2 40
Brooke's..... " 2 65
*Gate.*—See Goods, Bright Wire.
*Grass.*
Common, Nos. 2 3 1
Per doz..... $1 75 $1 80 $1 90
German .....per doz 1 90
Little Giant..... " 3 10
Wood's..... " 1 30
*Hammock.*
With Plate..... " 31c
With Screw..... " 31c
*Lambrequin* or Drapery...per gro 21c
*Picture* .....50¢@50&10¢
*Potato and Manure*.....60&15¢
*Screw*, Brass.....80&20¢
(See Goods, Bright Wire.)
*Seat Spring* .....per lb 5½c

HOOPS—TUB.

Ever Ready..... per case $1 65

HOSE—GARDEN.

3 ply ¾ in. 35 lb. pressure per ft..5½c
3 " ¾ " 50 " " " ..7½c
3 " ⅞ " 60 " " " ..7 c
3 " ¾ " 60 " " " ..8½c
4 " ⅞ " 80 " " " ..8½c
4 " ¾ " 80 " " " . 10 c
6 " ¾ " 125 " " " .11½c
8 " ¾ " 150 " " " ..31 c
Cotton ¾ in. 75 lb. pressure per.. c
" ¾ " 150 " " " .9c

HUSKERS.

*Boss.*
Nos. E A B P
Dz. $1 85 $2 00 $1 95 Gr. $5 90 $5 20
Nos. 2000 3000 4000 O OX
Gr. $3 10 $6 75 Dz. $1 15 $2 20 $1 65
*Brinkerhoff's* .....per gr 14 50
*Harrington*.....per gr 4 20
*Ideal*—Nos. 102 101 100
Per doz..... $1 35 $2 50 $3 75
*Johnson's* .... .....per gro 7 75

IRON.

See Metals—First column.

IRONS.

*Curling.*
Common .... .....per doz 33c@48c
Princess.....per doz $0 60
Yale..... " 0 84
Oxford..... " 1 10
Ruby ..... " 1 50
Tourist, Folding ..... " 0 90
*Pinking*..... " 0 60
*Plane.*
Wood Bench.....20&5¢
Stanley R. & L. Co. (new list)25&5¢
*Sad.*
Charcoal.....per doz $10 75
Common, Polished, per 100 lbs 8 50
" Nickel Plated, " 4 75
Chinese Polishing.....per doz 7 60
Laundry, No. 1, $5 75; No. 2, $6 25 per doz.
Mrs. Pott's.
No. 50 J, Enterprise...per set 79c
No. 55 J, " ... " 76c
No. 50 T, " ... " 82c
No. 55 T, " ... " 79c
No. 50, Howells'..... " 72c
No. 55, " ..... " 69c
Tailors' Sad .....per lb 4¼c
" Geese..... " 4¼c
*Tuyere.*
Single Duck Nest.....per doz $5 25
Double " " ..... " 6 25
Sutton.....each 2 60

JACKS.

*Locomotive* .....75&5¢
*Wagon.*
Meeker's .....per doz $4 25
Miller's No. 2 ..... " 7
Winner..... " 7

KETTLES.

Brass.....20¢
Caldron.....50¢
Copper.....per lb 27½c
Maslin.....66⅔¢
Sugar .....50&5¢

KNIVES.

*Beet Topping.*
Clyde, 9-in. Scimiter Blade.dz $4 25
" 12-in. Straight " .dz 2 50
*Cooper's Hoop* .....15¢
*Corn.*
Acorn.....per doz $2 65
Ajax..... " 2 25
Clipper, Light, $1 75; Heavy, $1 90 per doz.
Disston's.....per doz $3 15
Easy ..... " 7 75
Rugged Razor ..... " 2 40
H. S. Earle's ..... " 3 15
*Drawing.*
Standard.....70¢
Adjustable .....20¢
Barton's Carpenters'.....10¢
" Folding Handle....25&5¢
*Hay.*
American, Sickle Edge...doz $10 25
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 25
Iwan's Sickle Edge..... 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 5 75
Wadsworth's Sp'r Point " 8 75
*Hedge.*
Ajax, Heavy, $5 75; E Heavy, $7 75 per doz.
*Mincing.*
Common, Single .....per doz 48c
" Double..... " 65c
Streeter, 4 Blade, $1 30; 6 Blade, $1 90 per doz.
*Putty.*
Common.....per doz 84c
Goodell's.....per doz $1 30@$1 80
Russell's..... " 1 75@ 2 25

KNOBS.

*Door*, Mineral.....per doz 0 70
Porcelain ..... " 0 80
Jet..... " 0 80

LADDERS.

*Common Long* .....per ft 9c@14c
*Extension* .....per ft 12c
*Step.*
Common..... " 7c
" With Shelf, add 10c.
I X L.....per ft 17c
Miller's Household. per ft 13c@15c

LANTERNS.

*Bull's Eye Police.*
3-in Flash Light.....per doz $6 00
2¾-in Regular..... " 4 00
3-in Regular..... " 5 00
*Tubular*, Berger.....40&10&5¢

LEADERS—CATTLE.

Nos. 1 2 3
Per doz... $0 70 $0 85 $3 75

LEATHER—LACE.

*Cut* .....50&10¢
*Sides*, Ex. Quality.....per sq ft 20c

LEATHERS—PUMP.

Valve and Plunger.....50¢

LIFTERS.

*Stove Cover.*
Japanned.....per gro $3 75
Coppered..... " 3 60
Chilkoot..... " 4 50
Devore's..... " 5 50
Zero ..... " 3 90
*Transom*, Payson's.....70&10¢

LINES.

*Chalk*, Twisted in 20-ft hanks.
Nos. 15 14 13 12 11
Per doz.. 10c 12c 17c 22c 29c
Twisted in 50-ft balls.
Nos. 1 2 3 4
Per doz.... 24c 30c 36c 44c
Braided in 20-ft hanks.
Nos. 0 1 2
Per doz..... ..... 23c 26c 32c
Masons', in 100-ft hanks...doz $1 90
*Clothes.*
60-ft Jute .....per doz $0 95
72-ft " ..... " 1 10
60-ft Sisal ..... " 1 60
72-ft " ..... " 2 10
60-ft Cotton..... " 1 35
50-ft Braided Cotton..... 1 10

LINING—STOVE.

In Bricks.....per crate 43c

MACHINES.

| *Boring* | Without Augers. | With Augers. |
|---|---|---|
| Ajax .....per doz | $5 25 | $6 75 |
| Angular.. " | 3 25 | 5 00 |
| Boss ..... " | 4 50 | 5 00 |
| Upright.. " | 2 90 | 4 00 |

*Leather Riveting.*
Chicago, Pomeroy ....per doz $9 75
Excelsior..... " 2 50
Handy..... " 2 10
Little Giant..... " 3 10
Pony, Pomeroy..... " 8 00
*Washing.*
Boss. 1 2 5 3
Per doz.. $57 00 $63 00 $69 00 $80 00
Globe, No. 1.....per doz $56 50
O K Rotary..... " 55 50
Round Wayne..... " 26 50
U. S. Steel..... " 60 00

MALLETS.

*Carpenters'.*
Fibre Head, Small. Med. Large.
Per doz..... $5 00 $5 75 $6 75
Round Hickory.....per doz $1 75
" Lignumvitæ.... " 2 75
Square Hickory..... " 1 75
" Lignumvitæ .. " 3 25
*Tinners'.*
Applewood ..... " 1 60
Hickory..... " 85
Hickory Sheet Iron. " 80

*Door.* MATS.
National Rigid..... 50, 10&5%
Queen Flexible.....50%
*Stove.*
Standrd Quality.....per gross $3 75
Best " (Pure) " 4 75
Wire Covered Asbestos, Ex.
Heavy .....per doz 1 00

MATTOCKS.

Ajax.....65&10%
Extra..... 60%

MAULS.

| Iron, lbs. | 10 | 13 | 16 | 18 | 21 |
|---|---|---|---|---|---|
| Per doz. | $3 15 | $3 85 | $4 45 | 4 75 | $5 25 |
| Wood face, lbs. | 10 | 11 | 12 | | |
| Per doz..... | $4 75 | $5 00 | $5 25 | | |

*Wood Choppers'.*
Lake Super'r & Oregon Pat.70&10%

MEASURES.

| | ½ pk | 1 pk | ¼ bu |
|---|---|---|---|
| Galvanized..per dz | | | $3 65 |
| Japanned. .. " | $1 40 | 2 10 | $2 60 |

*Babbitt.* METAL.
Alm.....per lb 8½c
Best..... " 23c
Common, No. 4..... " 6½c
Copper Mixed..... " 18½c
Magnolia Metal..... " 19c
Tony..... " 10¼c
See Metals—In first column.

MICA.

First Quality.....40, 10&5%
Second Quality.....60%

MILLS—COFFEE.

Enterprise.....25&5%
National.....30%
Parker.....50&10%@50%

MOPS.

*Erie* .....per doz $3 15
*Handled Cotton.*

| Lbs. | ¾ | 1 | 1¼ | 2 |
|---|---|---|---|---|
| Per doz.. | $2 00 | $2 35 | $2 65 | $3 25 |

MOWERS—LAWN.

*Ball-Bearing.*

| In. | 15 | 17 | 19 | 21 |
|---|---|---|---|---|
| Each..... | $7 50 | $8 50 | $9 50 | $10 50 |

*Champion.*

| In. | 12 | 14 | 16 | 18 | 20 |
|---|---|---|---|---|---|
| Ea.. | $2 30 | $2 35 | $2 35 | $3 65 | $2 75 |

*Champion, High Chief.*

| In. | 16 | 18 | 20 |
|---|---|---|---|
| Each..... | $4 00 | $4 50 | $5 00 |

*Cheap Grades.*

| In. | 12 | 14 | 16 | 18 |
|---|---|---|---|---|
| Each..... | $2 10 | $2 10 | $2 10 | $2 20 |

*Clipper* .....50&10&10%
*Girard*, in. 14 16
Each .... ..... $3 25 $3 50
*Philadelphia.*
All Styles Except A & E 60&10&10%
Style A .....50&10%
Style E, High Wheel..60,10,10&10%
Drevels.....50%
All Day.....Net Price

*Horse Shoe.* NAILS.
Ausable.....50%
Capewell .....10%
Perfect.....40&5%
Putnam ..... 10-5%
Star .....35%
*Picture.*
Brass Head.....40&10%
Judd's .....40&10%
*Brads*.....80&10&10%
*Furniture* ..... .....40%
*Wire.*
Small Lots. .....$2.25
Carload " ..... 2 15
Cement Coated ..... 2 10

NETTING—POULTRY.

Galvanized Before Weaving.80&20
" After Weaving..80&15
Cut Pieces.....65&5%

NIPPERS.

*End Cutting.*
P. S. & W. Co.....40&5%
Stubb's Pattern .....40&10&5%
*Hoof.*
Heller's.....40&5%
P. S. & W. Co.....40&10%
V. & B .....40-5%

*Hose.* NOZZLES.
Genuine Boston.....per doz $3 15
Genuine Gem..... " 3 15
Magic ..... " 3 40

NUTS—HOT PRESSED.

*Square Blank.*

| In. | ¼ | ⅜ | ½ | ⅝ | ¾ | ⅞ | 1 |
|---|---|---|---|---|---|---|---|
| Lb. | 9c | 6c | 4c | 3½c | 3¼c | 3¼c | 3c |

*Square Tapped.*

| In. | ¼ | ⅜ | ½ | ⅝ | ¾ |
|---|---|---|---|---|---|
| Lb. | 11¾ | 7½ | 5¼ | 4½ | 4¼ |

For 5 lb. boxes add ⅛c per lb. to above prices.

OILERS.

Chase Pattern.
Brass and Copper .....35%
Zinc.....60%
*Engineers'.*
Cannon .....10%
Tin.....per doz $2 00@$3 00
*Machine.*
Ajax.....per doz $0 80
Copper Plated Steel... " 1 50
Malleable Iron.....40&10&5%
Tin.....per doz 55c@65c

OPENERS.

| *Box*, in. | 10 | 12 | 14 |
|---|---|---|---|
| Flat....per doz | $2 85 | $3 60 | $4 15 |
| Round.. " | 2 10 | 2 25 | 2 75 |

*Can.*
Delmonico..... per doz 1 30
Never Slip..... " 0 65

*Crate*, V. & B..... " 5 75

OUTFITS—COBBLING.

Combination ..... .....per doz $11 50
Economical .... ..... " 4 90
Family..... " 10 00

PADLOCKS.

Standard Wrought.....70&10&5%
Champion .....50%
Eureka.....40&10&5%
Yale..... .....60&5%

*Cream.* PAILS.
14-qt., Without Ga....per doz $2 75
20-qt., " " .... " 3 25
20-qt., With Gauge.... " 4 20
*Sap*, 10-qt., Galvanized, $1 60; 12-qt., Galvanized, $1 85 per doz.
*Stock*, Galvanized.

| Quarts. | 14 | 16 | 18 | 20 |
|---|---|---|---|---|
| Per doz... | $3 75 | $4 00 | $4 65 | $5 25 |

*Water*, Galvd, qts. 10 12 14
Per doz..... $1 75 $2 00 $2 35
*Wood.*
Cable, 2-Hoop, $1 90; 3-Hoop, $2 10 per doz.
Cedar, 3-Hoop, $2 85 per doz.
Standard, 2-Hoop, $1 65: 3-Hoop, $1 85 per doz.

PANS.

*Dripping*.....50&10&5%
*Fry*, Common.....60&10&5%
Acme .....66⅔&5%
*Roasting.*
Brownie.....Each 30c@37c
L. & H..... " 58c@80c
*Building.* PAPER.
Plain.....per 100 lbs $1 15
Tarred..... " 1 25
Tarred Felt..... " 1 80
Diamond A, Red Rosin.pr roll 0 60
Leader, Red Rosin..... " 0 45
*Sand and Emery.*
Ajax.....50&10%
B. & A.....50 & 5%
*Wrapping.*
Grecian Express .....per lb 3⅜c
Rag ..... " 2⅜c
*Apple.* PARERS.
Bay State .....per doz $13 00
Reading ..... " 6 75
Turntable ..... " 6 00
White Mountain..... " 5 25
*Potato.*
Goodsell's Saratoga..per doz. $6 50
White Mountain..... " 6 00

PICKS

Adze Eye Ore.....65&10%
Drifting and Poll Picks.....60&10%
Ajax Railroad.....60%
Extra Railroad.....65&10%
Surface..... .....65%

PINCHERS.

Carpenters', wrt. iron, pol. steel jaws.....80%
Blacksmiths'.....50%
P. S. & W.....40&10&5%

*Clothes.* PINS.
Common.....per gr..$0 12
Hoyt's..... " .. 30
U. S..... " .. 70
*Picket.*
Fluted 15 in.....per doz..$0 70
" 21 in..... " .. 1 60
Spiral ..... " .. 1 90

PIPE.

| *Conductor.* | Nested | Not nested |
|---|---|---|
| Eastern, A... | 7&7⅛% | 75&2⅛% |
| Eastern, B. | 75&10&2⅛% | 75&7⅛% |
| Central ..... | 75&7⅛% | 75% |
| Southwst'n.. | 70-&7⅛% | 70&2⅛% |
| Texas..... | 70&7⅛% | 70&2⅛% |
| Mo. River.... | 70&7⅛% | 75% |
| Southern ..... | 70&10% | 70&5% |

*Lead.*
Full coils.....per lb... 6
Cut " ..... " .. 6½
*Stove.*

| Acme—In. | 5 | 6 | 7 |
|---|---|---|---|
| Smooth, per jt. | 10½c | 10½c | 12½c |
| Planished, " .. | 32c | 33c | 42 c |
| Peerless--Smooth.. | 8½c | 9c | 11½c |
| Polished. | 16c | 18c | 22 c |
| Planished | 28c | 31c | 40 c |
| Made-up—In. | 5 | 6 | 7 |
| Smooth..... | 8¾c | 9c | 12 c |

7 to 6 in. Smooth Tapers, pr jt..14c
6 in, Smooth T's..... " ..30c
7 to 6 in. Planished Tapers.....45c
*Wrough't Iron Gas Pips.*
⅛@⅜-in., black.....discount, 62½%
⅜ " ..... ..... 65%
⅜-in. to 4-in, black.... " 70&5%
4½ " 6 " .... " 70&5%
7 " 12 " ... " 65%
⅛@⅜" galvanized " 50%
⅜ " " " " 55%
⅜ " to 4 " " 57½%
4½ " " 6 " " 57½%
7 " " 12 " " 52½%

PLANES.

Siegley Iron Bench.....50&10%

*Corn*, PLANTERS.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00
*Potato*
Acme.....per doz.. $6 25
Challenge ..... " .. 10 75
*Fencing.*
Cronk's.....per doz..$9 25
Farmers' Choice..... " .. 8 75
Russell's..... " .. 8 65
*Flat and Round Nose.*
Bernard's.....30%
German.....50%
Lodi.....40%
Paragon.....40&10%
P. S. & W. Co.....60%

*Gas*--In. 8 10 12
Per doz.....$3.10 $4.00 $4.90

PLIERS.

| *Button's*--In. | 4½ | 6 | 8 | 10 |
|---|---|---|---|---|
| Per doz.... | $2.60 | $3.10 | $3.90 | $5.20 |

*Button' Pattern.*

| In. | 4½ | 6 | 8 | 10 |
|---|---|---|---|---|
| Per doz. .. | $2.35 | $2.50 | $3.45 | $4.40 |

*Cutting.*
Bernard's.....30%
Cronk's Impr'vd Button Pliers.75%
Cronk's Linemans No. 80.....40%
Cronk's Stubbs Pattern....50&10%
Cronk's No. 1.....60&10%
Cronk's Staple Puller Pliers..$9 00
Lodi.....40&10&5%
4 Tube, revolving.... " .. 5 25
*Tinners'.*
Hollow.....
Solid.....each..5½c

PLUMBS AND LEVELS.

Common.....75%@75&10%
Cook's.....40%
Davis' Iron .....30%
Davis' Inclinometer.....20%
*Stanley's*

| Nos. | 00S | 0S | 2S | 3S |
|---|---|---|---|---|
| Per doz.. | $4.50 | $5.20 | $7.60 | $8.65 |
| Nos. | 30 | 25 | 50 | 35 |
| Per doz. | $13.00 | $17.50 | $17.50 | $12.35 |

POINTS.

Drive Well Points..... 80&10%

POKERS--STOVE.

Wr't Iron, str't or bent, per doz.$0 50
Wr't Iron, wood hand'ls " 75
Nickel pl'td. coil hdl's.. " 70

POKES--ANIMAL.

American .....per doz.....$2 60
Brown's, wr't steel " ..$5 25@5 25
Eagle..... " .....$4 25
Success..... " ..... 2 60

POLES--FISHING.

*Bamboo*

| Ft. | 12 | 14 | 16 | 18 | 20 |
|---|---|---|---|---|---|
| Pr 100.. | $2.75 | $3.40 | $4.75 | $6.00 | $7.75 |

POLISH.

*Metal.*
Pride of the Bar..... " .. 1 60
Putz Cream.

| Pts. | 1-6 | ¼ | ½ |
|---|---|---|---|
| Per doz..... | $0.84 | $1.25 | $1.80 |

| Pts. | 1 | 2 | 4 | 8 |
|---|---|---|---|---|
| Per doz. | $3.60 | $6.00 | $9.00 | $18.00 |

White Silk, half pints, per doz.$2.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine

| Pts. | 1-6 | ½ | 1 | 2 |
|---|---|---|---|---|
| Per doz... | $0.68 | $1.30 | $2.15 | $3.00 |

*Shoe.*
M. D. C.....per doz..35c@50c
F. C. O..... " .....40c
T. M ..... " 50c@$1 25
Imperial.....per gr.....$5 00
*Stove.*
Black Eagle, 1 lb cans, prgr..$15 00
Black Silk—
5 lb. pail ..... 70c
Paste, 5 oz. cans per doz.....$1.00
Paste, ½ lb. cans, per doz... 1.00
Black and Japanned—
Liquid, ½ pint cans per doz. 1.00
Liquid, 6 oz. cans per doz.... 75c
Steel Range Gloss per doz.... 1.75
Blackene, 1 lb cans....pr gr... 13 00
Black Jack, ¼ lb cans. " .. 9 00
Dixon's Carb. of Iron. " .. 5 75
Nickel Plate..... " .. 4 50

POPPERS, CORN.

Round or Square, 1 qt. per doz., 85@95c
Square, 1½ qt.....per doz., $1 00
Square, 2 qt.....per doz., 1 25
1 qt. reversible .....per doz., 1 50

POTS—FIRE.

Bernz.....each..$3 85
Clayton & Lambert's, each, $4 75@6 25
Gate City.....each.. 6 25
Gem ..... " .. 6 75

POWDER.
See Ammunition.

PRESSES—FRUIT AND JELLY.

Enterprise Manufacturing Co... 25%
Henis .....per doz. $2 10

PRUNERS.

Disston's Pole.....per doz..$7 50
Henry's Improved..per doz..65&10%
Water's Improved. " 70, 10&5%

PULLERS.

*Cork.*
Modern.....each..$2 50
Quick and Easy..... " .. 2 90
*Nail.*
Giant.....per doz..$9 00@10 50
Giant Pattern. " .. 00
*Tack*--Giant .... " .. 60

PULLEYS.

*Awning*--Jap'd.....40&5% to 35&5%
*Clothes Line*.....20&10%
*Hay Fork.*
Iron Wheel, 5 in .....per doz..$1 85
Wood Wheel, 6 in ... " .. 1 80
Wood Wheel, 6 in...
pass knot..... " .. 2 25
*Hot House*--Jap'd .....30&5%
*Screw*..... " .....30&5%
*Side*..... " .....30&5%
*Sash.*
Chicago .....per doz..$0 29
Clark's..... " .. 42
Common Sense, 2 in.. " .. 26
" Pattern, 2 in.. " .. 30
Empire..... " .. 34
Ideal..... " .. 22

PUMPS

*Pitcher Spout.*

| Nos. | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Each..... | .90 | $1.00 | 1.10 | $1.40 |

PLATES--TIN.
See Metals in Column 1.

*Spray.*
Blizzard.....per doz..$14 25
Cyclone, tin..... " .. 3 90
" copper..... " .. 6 75
Daisy..... " .. 8 75
Little Giant.....each.. 2 40

PUNCHES.

*Conductors'*, No. 22....per doz..$2
*Machine*.....per lb..
*Saddlers'.*
Common.....per doz..60c@70c
Good..... " ..75c@84c

PUTTY.

*In Bladders.*
Strictly pure .....per 100 lbs. $2 35
Commercial ..... " " 2 10

RAIL.

*Barn Door.*
Light Wrought.. .....per ft. 3c
Safety ..... " 4½c
Single Flange ..... " 1¾c
Smith's Wro't Bracket—plain 3¼c
Smith's Special ..... .....4¼c
Smith's "Never Jump".....11c 50%
Smith's Plain Steel.....30%
Smith's Milled Steel .....4¼c
*Sliding Door.*
Painted Iron .....per ft. 4¼c
Bronzed wr't iron..... " 8½c

RAKES.

*Coal* or Road.....per doz. $6.50
*Garden.*
Cronk's Champion.....70%
Cronk's Victor.. .....75%
Steel, braced .....75&15%
Steel, bow.....70%
Malleable iron, heavy.....70%
*Hay*—Wood.....per doz. $1 40@2 00
*Lawn*—Wood.
Common .....per doz. $2 50
Automatic..... " 6 00
New Lawn Queen .... " 3 60
Jumbo, 36 teeth ..... " 6 50

RASPS—See Files.

REGISTERS.
List July 1, 1903.
Black and White Japanned .70 to75%
Nickel Plated.....70 to75%
Electroplated, Brass, Bronze or Copper.....70&75%

RINGS
*and Ringers*—Hog.
Blair's Rings .....per doz. 60c
Blair's Ringers ..... " 84c
Brown's Rings..... " 65c
Brown's Ringers..... " 90c
Champion Rings..... " $2 25
Champion Ringers..... " 1 70
Hill's Rings..... " 48c
Hill's Ringers..... "70c@95c
Mazor Rings ..... " 80c
Mazor Ringers ..... " $1 15
Perfect Rings ..... " 84c
Perfect Ringers..... " $1 05
Wolverine Rings..... " 1 50
Wolverine Ringers.... " 70c
*Bull.*

| Copper | 2 in. | 2½ in | 3 in |
|---|---|---|---|
| Per Dozen | | $1 25 | 1 70 |
| Rea's Impro'd Self Piercing copper, pr d'z | $1 50 | 1 75 | 2 00 |
| Steel, per doz | | $ .95 | 1 05 |
| Nickel Plated | | 1 35 | |

*Fruit Jar*—White .....per lb. 30c
*Key.*
Split, round.....per doz. 1
Split, square ..... " 35c
Ball, round..... " 35c

RIVETS.
*and Burrs.*
Copper Belt .....60&10&5%
Coppered Iron .....75%
Tinners'.....60%@10%
*Hame*.....per lb.
*Slotted Clinch* .....per doz. 40c@45c
*Tubular*—Nos. 1 and 2, assorted sizes.....per doz. 45c

ROPE.
Per lb.
*Manila*, 7-16 inch diameter and larger rates ..... 11½c
*Sisal*, 7-16 in. and larger..... 8½c
*Cotton.*
¼ and 5-16-in. on reels. per lb. 13½c
¼ and 5-16-in. in coils... " 14c

RULES.

Boxwood.....60%
Ivory .....35&5%

SASH WEIGHTS.

Per ton, f.o.b. Chicago.....$30.00

SAWS.

*Back.*
Disston's.....25&7½%
Jackson's .....25&7½%
*Butchers'*—Disston's .....25&7½%
*Circular.*
Disston's.....50%
Hiles' .....50-10%
*Compass.*
Common .....per doz. $1 35@1 60
Disston's .....25&7½%
*Cross-Cut.*
Atkin's.....40%
Disston's.....40&10% &50%
Pocahontas Bit.....per ft. 39c
Pocahontas, Blued ..... " 41c
*Dehorning.*
Atkins'.....per doz. $5 50
Disston's ..... " 5 75
*Hack.*
Disston's .....25½%
Keystone .....33⅓%
Sterling Hack Saw Blades.....25%
Sterling Hack Saw Frames....30%

SAWS—CONTINUED.

*Hand and Rip.*
Brown's .....30&7½%
Disston's No. 7.....30&7½%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120.....25&7½%
Gorham's Comb.....30&7½%
Keystone.....30&7½%
Sam Sickles', hand...per doz. $4 25
"I Will," hand..... " 5 75
"I Will," rip..... " 6 75
"U. S. A." hand..... " 12 25
"U. S. A." rip..... " 14 25
*Keyhole*—Disston's .....25&7½%
*Kilchen*
Sterling.....25%
*One Man* .....50%
*Panel.*
Brown's .....30&7½%
Disston's No. 7.....30&7½%
Disston's D100.....25&2½%
"I Will" .....40%
"U. S. A.".....40&10&5%
*Pruning.*
Avery's Duplex .....25&7½%
Brown's .....25&7½%
Disston's.....25&7½%
*Wood.*
Common.....per doz. $4 50
Handy ..... " 7 50
Happy Medium ..... " 7 00
Wood Sawyers' Delight " 8 25

SAW SETS.

Common Lever.....per doz. $ 1.20
Stillman's Lever.....per doz. 1.30
Leach's.....per doz. 5.00
Nash's.....per doz. 4.20
Monarch.....per doz. 6.50
Aikin's Pattern.....per doz. 3.50

SAW FRAMES.

Common, plain.....per doz. $1 20
" painted..... " 1 60
*Counter.* SCALES.
Fairbank's Standard.....30, 10&5%
Hatch's.....per doz. $21 50
Little Detective, 1 2 3
Each .....$2 00 2 25 2 10
No. 1 Tea .....per doz. 7 75
Union Platform.....each 2 40
Pelouze .....40&10%
Turnbull's Market.....50%
*Platform.*
Common, 600 800 1000
Each .....$8 20 8 75 9 50
Chicago Standard.....30 to 33⅓%
Fairbank's Standard.....40%
Osgood..... .....50%

SCOOPS.

*Grain.*
½ Bu. "Hercules," per doz..$13 75
1 " " " " ... 15 50

*Box.* SCRAPERS.
Stanley's Adjustable, per doz. $3 60
Triangular ..... " 2 50
*Cabinet.*
Ajax .....per doz. $3 25
Cast Steel ..... " 65c@75c
Stanley's No. 80..... " $8 40
*Road.*
Cubic ft. 7 5 3
Without runners, ea. $4.35 4.10 3.85
With runners.... " 4.60 4.35 4.10

*Bench.* SCREWS.
Iron..... ..... 40&10%
Wood, white maple..per doz..$3 60
*Hand*--Wood.....20%
*Hand Rail*.....70&10%
*Jack* .....75&5%
*Lag or Coach*, .....80%
*Saw*—Centennial.
Nos. 1 2 3 4
Per doz..... 22c 25c 32c 36c
*Wood.*
F. H. Bright Steel ....87¼, 10&10%
R. E. Blued Steel.....85&5%
F. H. Jap'd Steel.....82½&5%
F. H. Brass .....85&5%
R. H. Brass .....80&5%
R. H. Nickel Plated.....75%

SCYTHES.

Clipper, grain.....per doz..$7 75
Dutchman, grass ..... " .. 5 25
Golden Clipper, grass. " .. 5 00
U. S. A., grass..... " .. 5 75
*Nail.* SETS.
Round, common.....per doz..$0 33
Square " ..... " .. 42
Octagon " ..... " .. 33
Square, Buck Bros.. " .. 1 25
Cup Point, knurled, pr doz.70c@90c
*Rivet.*
Farmers'.....per doz..$1 45
Tinners'.....50&10%
*Saw.*
Aiken's Pattern.....per doz..$3 50
Common Lever..... " .. 1 20
Disston's Monarch... " .. 6 50
" X Cut..... " ..11 75
German..... " .. 1 25
Morrill's Old Style... " .. 5 00
" Pattern.... " .. 4 50
Leach's..... " .. 4 80
Nash's Hand..... " .. 4 00
" X Cut..... " .. 5 50
Stillman's Lever..... " .. 1 30
" X Cut.... " . 2 50

SHARPENERS--SKATE.

Diamond.....per doz..$1 60

SHAVES--SPOKE.

Iron.....per doz..$1 35@$3 75
Wood..... " .. 2 75@ 4 75
Bailey's .....50&5%
Goodell's.....15%
Stanley's Universal.....30&5%

*Pruning.* SHEARS.
Buckeye, No. 1.....per doz..$6 75
" No. 2..... " .. 8 40
California Pat., 9 in.. " .. 4 25
" 10 in.. " .. 5 00
Draw Cut, No. 3..... " ..14 75
" No. 4..... " ..17 50
Henry's Pat. 0 01 14 012
Per doz...$1.90 $2.50 $3.15 $3.50
Star.....per doz..$4 75
*Sheep*--No. BBA.
6 in. 6½ in. 7 in.
Reg.Grip..$11.25 $11.50 $12.00
Nar.Grip.. 11.75 12.00 13.00doz.
*Tinners'*--See Snips.

SHEAVES--SLIDING DOOR.

In. 3 4 5
*Common*..Per set..$0.42 $0.48 $0.70
*Hatfield's*. " .. .75 1.00 1.60

SHELLERS--CORN.

Union .....per doz..$7 25

SHOT--See Ammunition.

SHOVELS AND SPADES.

*Drain.*
Iwan's Perfection.....50%
*Railroad, Etc.*
Gold Hibbard's.....per doz.. $9 25
C. H. Conovers's.... " .. 7 75
Beckwith's..... " .. 7 75
Hickory..... " .. 6 25
Greenleaf's ..... " .. 5 75
Columbus..... " .. 5 00
Ames' new list .....Discount 12½%
*Coal.*
No. 2 Ajax.....per doz..$5 25
No. 4 Golds..... " .. 6 25
Ames' new list.....Disco nt 12½%

SIFTERS.

Hunter's Genuine..... per doz. $1.10
" Imitation..... " .90
Tin Rim, 16 mesh plain wire 1.35
Wood " 16 mesh plain wire .80

*Cast Iron.* SINKS.
Painted..... .1 &5%
Enameled, White ..... 60-10&10%
*Wrought Steel.*
Painted, new list.....40-10&5%

SLEDGES--See Hammers.

SNAPS--HARNESS.

Champion.....65%
German Pattern.....30&5%
Judd's Pattern.....60&10%@70%

SNATHS.

Double Ring, Bush....per doz..$6 75
Patent Loop " .... " .. 7 30
" " Grass.... " .. 6 50

SNIPS--TINNERS'.

Hernisch's .....40&5%
National .....40&5%
P. S. & W. Co.'s.....35&5%

SOLDER.

See Metals, Column 1

SPRINGS--DOOR.

*Perfect.* Nos. 1 2 3 4
Per doz..... 32c 38c 45c 48c
*Reliance*, Light $1.40, Heavy $2.20 doz.
*Star*.... " .90, " 1.30 "
Torrey's.....per doz..$1 25
Warner's— No. 11 No. 13
Per doz..... 70c $1 30

SQUARES

*Steel and Iron* .....70%
(Add for Bluing, $2.50 per doz., net.)
*Mitre*--Stanley's No. 12 .....40%
*Try.*
Stanley's No. 20, new list...30&10%
" Nos. 13 and 14.....40%
*Try and Bevel*--Stanley's.....40&5%
*Try and Miter.*
Fox's.....per doz..$7 25
Winterbottom's .....50%

SQUEEZERS--LEMON.

Common Wood.....per doz..$0 70
Porcelain Lined, wood. " .. 1 20
Boss, tinned iron ..... " .. 82
Pearl, nickel plated... " .. 1 30
Star " " ..... " .. 1 60
Little Giant, tin'd iron " .. 4 25
King..... " .. 2 50
Drum ... ..... " .. 4 75

STAPLES.

*Blind*—Barbed .....per lb. 9½@10c
*Butter Tub*..... " 8@8½c
*Fence*, less than carload.
Polished .....per 100 lb. $2 40
Galvanized ..... " 2 70
*Netting*—Galvanized.....per keg 3 60
*Wrought.*
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples ..... 85-10&5%
Extra heavy .....75&10%

STEELYARDS.

Discount 25%

STONES.

*Axe.*
Hindostan .....per lb. 5½@7c
More Grit..... " 9½c
Washita ..... " 16½c
*Emery* .....60%@60&5%
*Oil*—Unmounted.
Arkansas Hard .....per lb. $2 00
Arkansas Soft ..... " 1 15
Hindostan ... ..... " 6½@8½
*Oil.*—Unmounted.
Lily White..... per lb 43c
Queer Creek..... " 14½c

Ouachita..... " 35c
Washita..... ..... " 25c
*Sythe*—Black Diamond per gro. $7 75
Clear Grit ..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 20
La Moille..... " 7 00
White Mountain.....per gro. 8 50
Willoughby Lake .... " 6 25
Red End ..... " 3 15

STOPS—BENCH.

Hotchkiss'.....per doz. $3 60

STOPPERS—FLUE.

Common .....per doz. 42c
Crown..... " 48c
Gem, flat, painted..... " 72c
Gem, cor'd, decorated.... " 68c
Kirch's ..... " $1 20
Peerless ..... " 72c
Skinner's Common Sense " 96c

STRAPS.

*Scoop* .....per doz. prs. $1 80
*Skate*..... " " 60@70c
*Carpet.* STRETCHERS.
Bullard's .....per doz. $3 90
Excelsior ..... " 6 00
Malleable Iron..... " 70
Perfection ..... " 6 00
King ..... " 4 50
*Wire.*
N. S. Elwood's .....per doz. $5 75
O. S. Elwood's..... " 6 00
Little Giant ..... " 5 50
Star Lever..... " 6 25
Star Tackle Block.... " 9 25
Warner's ..... " 6 25

SWIVELS.

Malleable Iron .....per lb. 5½c
Wrought Steel.....per gro. $4 50

TACKS.

American Cut.....90&5%
American Wire.....85&25&10%
Bill Posters Cut ..... ....90&40%
Blued Carpet.....90&15%
Tinned Carpet.....90&15%
Gimp .....90&30&10%
Upholsters' Cut .....90&40&5%
Upholsters' Wire .....90&25%
Double Pointed .....90&20%
Copper .....per lb 27c
Canvas Nails.....75&5%
Clout Nails.....75&10&5%
Hungarian Nails.....80&5%

TAPES--MEASURING.

Asses' Skin .....40&10%
Bend Leather.....25%
Patent Leather.....25%
Lufkin's Steel.....30%
Lufkins Metallic .....30%

THERMOMETERS.

Tin Case.....per doz., 95c@$1 25
Wood Back..... " $1 75@ 9 00
Glass ..... " 15 50

*Bale.* TIES.
Single Loop..... 90%
All other kinds.....70%
*Cow*--See "Chains."

TOOLS—SAW.

Atkin's Dexter.....per doz. $4 25
Atkin's Excelsior..... " 6 25
Disston's Universal .....40%
McDonald's .....33⅓%

*Game.* TRAPS.
Newhouse.....50%
New Victor .....75-10%
*Mole*—Reddicks .....per doz. $5 75
*Mouse and Rat.*
Wood Choker.....per hole 11c
Tin Choker ..... " 9c
Delusion.....per doz. 85c
Imitation Sight, Rat .. " 80c
Marty Rat..... " $6 75
Marty Rat, Imitation.. " 3 75
Marty Mouse..... " 3 15
Marty Mouse, Imitation " 2 10
French Automatic..... each $3 60
*Fly.*
Balloon.....per doz. $1 10
Harper's..... " 1 25

*Brick.* TROWELS.
Standard.....30%
Brade's.....10&7½%
Disston's.....30%
Rose's.....25%
*Plasterers'.*
Standard .....33⅓%
Disston's.....30%
W. & McP.....25%

TRUCKS.

Bags.....each $1 70
Handy..... " 1 50
Warehouse.....60&5%
No. 1 2 3
Half Ironed.....$2.60 $3.40 $5.00
Full Ironed..... 3.90 5.75 6.75
TUBS-WASH. Ex.
No. 3 2 1 large
*Standard*, per doz. $5.25 6.25 7.25 9.75
*Dowel* .... " 5.60 6.60 7.50 10.00
*Cedar* .... " 6.50 7.50 8.25
*Indurated.* " 7.20 7.95 9.45 11.70
*Galvanized.* No. 1 2 3
Per doz .....$5.25 5.75 6.50
TWINE. per lb.
3-ply Cotton Wrapping.....22c
4 " " " " .....24c
4 " Cotton Extra Wrapping.....29c
3 " " " Hvy. Wrap'g.27c
4 " " Wrapping on tubes.23c
4 " " " " cones.24c
4 " " " " " 24c
India Hemp, ¼-lb. balls.....18c
" " ½-lb. " .....17c
" " ¼-lb. " ...doz., 65c

2-ply " ¼-lb. " .....11½c
3 " " ½-lb. " .....11½c
Jute Wrapping, ½-lb. balls.....11½c
Jute Wool, 1-lb. balls.....6c
*Seine.* Nos. 6 9 12 15 +
Soft, per lb. .26 .25 .24½ .24
Med. " " .25 .24½ .24
Hard " " .28 .26½ .25½
Staging, ¾-lb. ball, size 21.....24c
" ¾-lb. ball, " 24.....23c
" ¾-lb. ball, " 27.....23c
Bagging, ¾-lb. ball..... .....22c
3-ply "B" in hanks.....19c
4 " "B" " " .....19c
3 " "A" " " .....20c
3 " Silver Finish, in hanks....20c
*Fodder or Lath.*
130-strand..... 8c
200-strand..... 8½c

VISES.

Bonney's.....30%
Cheney's .....30%
Parker's Oval Slide.....50@50&10%
Parker's Parallel.....15@30%
Parker's Victor.....10%
Parker's Combination.....50&10%
Solid Box..... .....60&5%
Adam's Mechanics'.....each $2 65
Williamson Universal..... ..30%

WARE,

*Cast-Iron Hollow.*
Ground ..... 40, 10&2½%
Unground .....50, 10&3½%
Extra Finished.....40&10%
White Enameled.....40&5%
Maslin Kettles.....65%
*Enameled.*
Cherry Blossom .....33⅓%

WASHERS.

Standard O. G. cast iron, per lb..2¼c
Wrought iron in bulk per lb.:
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
7¾c 5½c 4c 3¾c 3½c 3½c 3½c
Wrought steel in 5 lb. boxes, per lb.:
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
8¾c 6½c 5c 4¾c 4½c 4½c 4½c

WEDGES.

*Ax*.....per doz....30c
*Galling* .....per lb..10½c
*Saw*..... " .. 8½c
*Calf.* WEANERS.
Fuller's, per doz..... $2 00 to $2 50
Tyler's Safety, per dz 1 85 to 2 40
Carroll's, per doz..... 2 50 to 3 25
Standard, per doz..... 2 75
Hoosier, per doz..... 3 10 and 4 15

WEIGHTS.

*Hitching*.....per lb..2½c
*Sash*--F.O.B. Chicago..pr ton..$20.00

WHEEL BARROWS.

Common Railroad....per doz..$16 00
Heavy " .... " .. 19 50
Railroad, ball bearing " .. 19 00
Santiago Steel Tray.. " .. 26 50
No. 04 Steel Dirt ... " .. 47 00
No. 04½ " " ... " .. 50 00

WHEELS.

*Corundum*.....70&10&5
*Emery*.....75&5%
*Well.* In. 8 10 12 14
Per doz.... $1.90 $2.20 $3.00 $5.50

WIRE.

*Barbed.* Painted. Galv'd.
Carloads...pr 100 lbs..$2.45 $3.75
Less than car " .. 2.55 3.85
*Brass.*
In coils..... .....20%
In 1 lb. spools, new list.....50&10%
*Broom*--Tinned.....60&10&10&10%
*Cable*—Same price as Barbed Wire.
*Copper.*
In coils.....20&10%33⅓%
In 1 lb. spools, new list.....50&10%
*Fence*--Smooth.
Nos. 6 to 9, Annealed, pr 100 lbs. $2.15
Nos. 6 to 9, Galv'd... " 2.45
*Hair*--New list.....50&10%
*Market.*
Bright, full bdles.....70&10%
Bright, broken bdles.....70%
Coppered, full bdles.....70%
Coppered, broken bdles ....65&10%
Tinned, full bdles..... .....70&5%
Tinned, broken bdles.....65&10%
*Picture.*—In coils.....80%@80&10%
In 5 lb. spools .....per lb..35c
*Plain*—Small lots.....$2.00
Car lots..... 1.95
Small spools 5c per hundred higher

WRENCHES.

Acme Standard.....60%
Alligator .....65&5%
Always Ready.....40&10&5%
Bemis & Call.....40%
Coe's Standard..... .40&10%
Girard's Agricultural..... 75&10%
P. S. & W. Co.'s Agricultural75&10%
" " Knife H'dle..50&5%
Wescott's "S".....33⅓%
Malleable "S".....per lb. 05½c
Malleable.....per lb. 05½c
Stillson Pipe.....60&5%
Trimo " .....60%
*Clothes.* WRINGERS.
No. 23, Guarantee.....pr doz. $27 00
No. 110, Guarantee..... " 27 50
No. 150, Sunshine ..... " 21 50
No. 130, Mendota ..... " 19 50
No. 12, Success..... " 18 50
Blue Bell, Ball Bear'g. " 25 50
No. D 110, Domestic... " 24 50
No. E 350, Empress... " 27 50
No. 122, Bicycle Ball-bearing..... " 36 50
No. 122, Swan..... " 36 50

# Wants and Sales.

**For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.**

## BUSINESS CHANCES.

## PATENTS

**HUBERT E. PECK**, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

To Buy or Sell.—Parties wishing to dispose of their stocks of merchandise, or to buy for cash or trade, should confer with the "Clarksville Real Estate & Exchange Company," Clarksville, Iowa, as they make a specialty of that line of business, having a large list of buyers at all times. 1

For Sale or Trade—For real estate or hardware stock, controlling interest in neat little foundry, including patents, patterns and a large amount of raw material. Great bargain for a stove man located in Missouri. Address "E5," Care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 26

Hardware Business for Sale—Stock of stoves, house furnishings, etc.; will invoice about $5,000; all clean, new goods in best city in eastern Illinois; 30,000 inhabitants; doing a thriving business; best of reasons for selling. Address "N.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 26

Wanted—A partner in an old established tin and furnace business; must be a good business man and have some practical experience; getting ready for a big fall trade and need $1,000; will sell all, but prefer partner. Address "Had," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 26

## TINNERS' TOOLS.

For Sale—Tinner's tools and stock. Good town and plenty of work. A good point for one who can do plumbing. Address Box 582, Bedford, Iowa. 24

For Sale—Complete set of tinner's tools in good condition and cheap; write for list by piece or set. Address Ebert Hardware Co., Truman, Minn. 24

## HELP WANTED.

YOUNG MAN—High School Graduate preferred, to prepare for lucrative Gov't Position. Begin with $800 salary. Gradual increase as deserved. Permanent. Box 570, Cedar Rapids, Ia.

Wanted—A sober all-round tinner for in and outside work; must understand furnace work; steady work all year round. Must have references. Address "Chicago," in care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 1

Wanted—To correspond with an experienced plumber, tinner and furnace man who would take an interest in established paying hardware business as manager of that department. Address "Plumber," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 1

Wanted—Three good tinners at once. Mohr-Jones Hdw. Co., Racine, Wis. 1

Wanted—Plumber and heating man, thoroughly competent to lay out and figure and do jobs of plumbing and steam and hot water heating. Must be of pleasing address, strictly temperate and of good character. Write us, giving reliable references. Permanent employment to right man at good wages. Fulton Hardware Co., Portland, Ind. 1

Wanted—Thoroughly good tinner, experienced in all kinds of roofing, spouting and shop work; must be strictly temperate in habits, and agreeable address. Permanent employment for right man. Send reliable reference as to ability and character. Fulton Hardware Co., Portland, Ind. 1

Wanted—Fair tinner and sheet metal worker who has some knowledge of windmill and pump work. Address R. W. Isaacs, Clayton, New Mexico. 1

Wanted at Once—Two or three good cornice makers. Address Henry Weyand Co., Inc., Waterbury, Conn. 26

Wanted—A good man for creamery and dairy supplies on all kinds of tin work. Address Emil Taege, Box 28, Arlington Heights, Ill. 26

Wanted at Once—A good tinner who can do all kinds of plumbing, hot water and steam heating, steady work year around, and good wages. State wages wanted in first letter. George Gale, Vinton, Iowa. 26

Wanted—Working foreman for cornice department; must be able to lay out details and get out work complete; state experience and wages wanted; steady position to right man. Address "Steady," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 26

Wanted—A first-class tinner; one that can do all kinds of guttering, tin roofing, furnace work, and must be willing to work at anything. State wages wanted. Address J. P. Becker, 1506 Main St., Peoria, Ill. 26

## SITUATIONS WANTED.

Situation Wanted—By experienced hardware man, married; thoroughly up-to-date, reliable and temperate; experienced stove salesman. Salary wanted, $20 per week. Write me for references. Competent to take full charge of store. Address "Reliable," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 26

Situation Wanted—By a practical all around tinner and sheet metal worker of 18 years' experience; plain cornice, fair on furnaces; good in gasoline, stoves and bicycle repairing; 32 years old, married and temperate. Can figure all kinds of work from plans; charge of shop. Firms looking for a hustler, address stating wage limit, and how long you have kept your tinners to "Tinner," 209 South 15th St., Murphysboro, Ill. 26

Situation Wanted—By a thorough hardware, implement and stove man of years of experience in the business as salesman, manager and buyer; will be open for engagement after July 1st. 212 E. Cherry St., Noblesville, Ind. 26


# A Household Ideal

For making sad-irons merry with heat, for heating water in tanks or boiling it in clothes boilers, for putting up fruit in canning time and other like handy housework the IDEAL Laundry Tank Water Heater is a gem—not "born to blush unseen."

It is a good seller for the Dealer who is fitting out homes and institutions with modern conveniences.

Circulars sent and discounts quoted to the trade.

**IDEAL Boilers**
**IDEAL Tank Heaters**
**AMERICAN Radiators**

**AMERICAN RADIATOR COMPANY**

**282-284 MICHIGAN AVE., CHICAGO.**

NEW YORK: 42-44 East 20th Street BOSTON: 44 Oliver Street PHILADELPHIA: 622 Arch Street
WASHINGTON: 706-12th Street, N. W. BUFFALO: 206 Mutual Life Bldg.
PITTSBURG: 926 Farmers' Bank Bldg. CINCINNATI: 336 West Fourth Street
CHICAGO: 282-284 Michigan Ave. MILWAUKEE: 126 Sycamore St. ST. LOUIS: 207-209 N. Tenth St.
OMAHA: 417 South Fifteenth Street MINNEAPOLIS: 204 Fourth Street, South
DENVER: 831 Fifteenth Street SEATTLE: 320 Lumber Exchange LONDON: 89-90 Shoe Lane, E. C.
ST. LOUIS EXPOSITION, MANUFACTURERS' BUILDING, Block No. 6-B.

## SPECIAL NOTICES.

### WANTED

Salesman calling on the hardware trade and furnace dealers, to sell furnace pipe, registers and supplies as a side line, on commission. Address "Furnace Pipe" care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3t-26

### WANTED

Salesmen to sell registers, sad irons, and gas stoves. Straight salary or commission. Detroit Register Co., Detroit, Mich. 3t. 26

### WANTED

Manufacturers' agent to represent our line of Daisy Spring Bottom Oilers and Nilson Adjustable Pipe Wrenches for all eastern, southern and western states to solicit jobbers' business. When writing mention states wanted and send references. Nilson Walters Wrench Co., Casselton, N. D. 2t.1

### FOR SALE.

Chance of a lifetime, neat, small store for sale, stock consists of housefurnishing goods, everyday hardware, and sewing machines and a full stock of repairs for same, horse and wagon, and business in good shape. Located in Western Pennsylvania first-class town and county seat. Address L, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2t-26

### IF YOU WANT

More Business—More Profit secure a license to build the Crown Ventilator and Chimney Jack on royalty. We furnish patterns, instructions, electrotypes, advertising matter, and can make it an object for you to supply the demand in your territory. Business steadily increasing. Full particulars for the asking. CROWN VENTILATOR CO., Milwaukee, Wis.

### WANTED

Manufacturers' Agent to represent High Grade line of Stoves and Ranges in Minnesota and the Dakotas.

Address "High Grade," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 4t. 24

### WANTED

Manufacturers' Agent to represent High Grade line of Stoves and Ranges in Ohio. Address "High Grade" care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 4t. 24

### WANTED

Energetic man as Steel Range and Mounting Foreman. Must understand his business Answer stating age and experience.

Address "Foreman," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ills. 24

### WANTED

A first-class tinner; assortment worker; no outside work; steady employment to the right party.

Cooney & Geiger, Indianapolis, Ind. 24

### WANTED

First class, experienced stove salesman. None but those who can show good record need apply. Address The Globe Stove and Range Co., Kokomo, Ind. 26

### WANTED

Stove Salesman on commission for an A 1 line of stoves for Kansas, Nebraska, Missouri and Dakota. Address, "On Commission," care The American Artisan, 69 Dearborn St., Chicago, Ill. 25

### WANTED

Bright young man to handle an A. No. 1 enameledware and tinware line for city and suburban trade. Give experience, reference and salary expected. Address "X Y", care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 26

### STOVE SALESMEN

wanted for Wisconsin, Minnesota and Iowa, to sell leading trade mark line. A first class opportunity for the right men. Address "L 3," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3t.26

### AN OPPORTUNITY.

We desire to dispose of our stove repair department, established 25 years, doing good business—other interests take our entire time. Patterns, repairs, good will and all for sale cheap. Address "Stove Repairs" care The American Artisan, 69 Dearborn St., Chicago, Ill. 25

### WANTED

Salesman of ability to take charge of all territory east of Chicago, south of Springfield, Ill., southern Missouri, Kansas, Oklahoma and the West. A well known line of Steel Ranges to be sold on commission.

Address "Able," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ills. 24

C. N. HOOPER, Dubuque, Ia.

### VITREOUS ENAMELING

TECHNOLOGIST

Designs, builds and starts new plants. Improves quality and reduces the costs in those already established.

### CEYLON PLUMBAGO

We are prepared to supply Ceylon plumbago to the American market cheaper than elsewhere. Samples are to be seen at the office of this Journal, as well as at the office of the Merrick Foundry Supply Company, Toronto, Ontario, Canada. 30 shillings per ton freight to New York harbor.

J. WICKRAMANAYAKA & CO., Kalutara. Colombo, Ceylon. 15

### WANTED

Enameledware and Tinware Salesman familiar with jobbing and housefurnishing trade in Iowa, Minnesota and Wisconsin by one of the best houses in the trade. An exceptional opportunity for a man who is considerably above the average. Give experience, reference and salary expected. Address "X Y" care THE AMERICAN ARTISAN. 69 Dearborn St., Chicago, Ill. 26

### Great Britain

I offer exceptional opportunities for selling American specialties in England. Increase your business. Send me your catalog and special prices. References irreproachable.

**P. T. STERN,**
**11, Queen Victoria St., London, Eng.**
Cable address: "Quizzing, London."

### WANTED

Two good cornice men at once. Address CREAM CITY CORNICE CO., North Milwaukee, Wis. 24

### WANTED

A stove salesman to cover retail trade tributary to Indiana. Must be man of ability and integrity. In replying, state age, experience had, wages wanted to start; also furnish name of last employer.

Address "Box 976," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago Ill. 23

### THE ELGIN

**We are General Agents for THE ELGIN**

Large water capacity; central water tube; circulation may be forced. Outside can, galvanized iron; painted and grained.

**ON LEGS!—Anti back-breaker.**

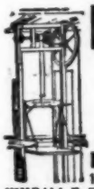
One dealer only in each town. We guarantee your profit. Get the agency.

**NORRIS & LORING HARDWARE CO.**
Exclusively Wholesale. CEDAR RAPIDS, IOWA.

## SHEET METAL
### Stamping and Forming

We will manufacture sheet metal specialties or novelties on contract or royalty basis.

THE KINSEY MFG. CO.
DAYTON, OHIO.
Manufacturers of KINWOOD Gasoline and Oil Stoves



## ELEVATORS

Improved Quick and Easy Rising Steam, Electric and Hand Power.
Send for circulars.
KIMBALL BROS CO.
1031 Ninth St., COUNCIL BLUFFS, IA.
KIMBALL ELEVATOR CO., 139 Vincent St., Cleveland, O.

## LIMONITE

The new brown enamelware, so heavily flecked with white as to be almost a gray. Shapes all of the best and heaviest steel. Ask also for catalogue of the new Azurelite with small samples of colors. The Enterprise Enamel Co., Bellaire, Ohio.

## Low Rates to the South

are made on the first and third Tuesday of each month by the

### SOUTHERN RAILWAY

at which times round trip tickets to points in the South and Southeast are sold at one fare plus $2.00.

A splendid opportunity is thus afforded the residents of the North and West to personally gain knowledge of the great resources and possibilities of a section which is developing very rapidly and showing results which are most satisfactory.

Low Priced Lands, Superior Business Opportunities, Unexcelled Locations for Factories can be obtained or are offered in all of the States reached by the Southern System.

Illustrated publications and full information upon request.

M. V. RICHARDS, Land & Industrial Agent, Washington, D. C.

CHAS S CHASE, Agent, Land & Industrial Dept., Chemical Building, St. Louis, Mo.

T. B. THACKSTON, Trav. Agt. Land & Industrial Dept. 225 Dearborn St., Chicago, Ill.

## ELECTROTYPE CUTS

MADE TO ORDER FOR ALL PURPOSES.
IF YOU WANT THE BEST MADE,
SEND US YOUR ORDER,
WE ARE PROMPT.
PRICES ARE EQUITABLE AND JUST.
ST. LOUIS ELECTROTYPE FOUNDRY
214-216 PINE ST. ST. LOUIS, MO.

The Classified Index Has Page Numbers

HOLDS $40.00.

**THE BASKET BANK.**

Is a splendidly finished, accurately adjusted MONEY SAVER. On account of its unique locking device customers say it *makes them save* No way to get the money out until $5.00 is saved, or some multiple of $5.00. Holds $40.00 in silver. Register keeps the count. Set them on your show case and they sell themselves. Retail for 75 cts. Ask your jobber or write the Manufacturers.

KEYLESS BANK CO. Ltd., 30-36 La Salle St., Chicago, Ill.

## Make More Money

Rural Routes are going in all around you. New boxes are needed on old routes. You should get this business. You *can* get it with

Bates-Hawley Patent **SIGNAL MAIL BOX**

It is the original box for Rural Routes with special endorsements of Postmaster General. The best made, the best liked, the best advertised and the easiest sold.

SIGNAL MAIL BOX CO.
106, Benton St., JOLIET, ILLINOIS.

**Century Box** is the best box made. Size, 8x7x18 inches. Retail price $2.00. Discounts to the trade.

**Tecumseh Box** is the best low priced box made. Size, 6x6x18 inches. Retail price, $1.25. Write for discounts.

CENTURY POST CO.
Tecumseh, Mich.

## Standard Rural Mail Box.

Approved by the Postmaster General.

Made of Heavy Galvanized Iron, Strong and Durable.

HOPSON-HAFTENCAMP CO.
25-27-29 Campau St., Grand Rapids, Mich.

## METAL SHINGLE ROOFING

With Montross Telescope Side-lock is the best roofing in the world for house or barn. Storm proof. Easily applied. Catalogue. Prices and Testimonials free for the asking.

Montross Roofing Co., Camden, N. J.

## DIXON'S STOVE CEMENT.

Applied easily. Dries rapidly. The best repair for cracked or worn fire-brick. Circular 18-L and sample upon request.

JOSEPH DIXON CRUCIBLE CO., - - - - JERSEY CITY, N. J.

**STOVE REPAIRS**
FOR ANY MAKE STOVE, RANGE OR FURNACE
***FULL STOCK—PROMPT SHIPMENTS***
COMPLETE LINE STOVE SUPPLIES AND WINDSOR FURNACES.
Write for booklets and prices.
***J. L. MORRIS STOVE REPAIR CO., - CHICAGO***

**REPAIRS** { PASTE, STOVE RODS, STOVE PUTTY, STOVE KNOBS, PIPE DAMPERS, MICA, ETC.
For all Stoves and Furnaces
**WM. T. DUST CO.**
DETROIT, MICH.

**GREAT WESTERN STOVE REPAIR CO.**
Repairs for all Stoves, Ranges, and Furnaces.
**312 Hennepin Ave., - - MINNEAPOLIS, MINN.**

316-318 North Third St.
ST. LOUIS, MO.

**AMERICAN STOVE REPAIR WORKS**
Manufacturers of
STOVE AND FURNACE REPAIRS
**186-188 W. Seventh Street, : ST. PAUL, MINN.**

**When things aren't going quickly, and you can't use twine;**
**When cobwebs gather thickly, just drop us a line.**

**PATTERNS**
STOVES, WOOD & METAL
MILWAUKEE PATTERN WKS
505-507 CEDAR ST.

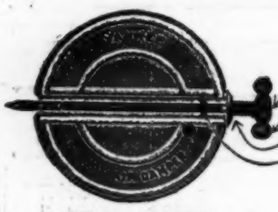
*The* **GEO. W. COPE,**
**Stove Pattern Works**
Corner Brush and Woodbridge Sts.
DETROIT, MICH.

NEW BLOOD——NEW IDEAS.
*The* **MANSFIELD STOVE PATTERN WORKS**
MANSFIELD, OHIO.
F. W. REYNOLDS, Proprietor.

**WELLER PATTERN Co**
DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS
QUINCY, ILL.

**MANUFACTURERS**
Contemplating establishing plants in the West should take advantage of a location on
THE NORTH-WESTERN LINE
C.&N.W.RY.
**Chicago & North-Western Ry.**
which reaches the famous
WATER POWERS, COAL FIELDS, IRON ORE RANGES, HARD AND SOFT LUMBER DISTRICTS
of the West and Northwest, and affords the best means of transportation to the markets of the world. For further particulars apply to
MARVIN HUGHITT, Jr., *Freight Traffic Mgr.*, E. D. BRIGHAM, *Gen'l Freight Agent*,
CHICAGO

**YANKEE ALL STEEL DAMPER**
**The Best and Easiest Damper to get in or out. Cheapest Damper made. Made also in oval shapes.**


HOT AIR DAMPER.

Steel Rod flattened and turned over handle.
Enameled Wood Handle, can't get out.
Spring and Washer.
This pin keeps washer and spring on the rod.
¼ inch cold-rolled steel rod. Can easily be driven through pipe, making small and same size holes on both sides.
Pin at this point with the one further up on the rod, hold the plate firmly, because they are made with large, elongated head. Steel damper plate.

SMOKE PIPE.

**You Can't Afford to Make Dampers When You Can Buy the Yankee.**

| Smoke Pipe Sizes, | 3 | 4 | 4½ | 5 | 5½ | 6 | 7 | 8 | Hot Air Sizes, | 6 | 7 | 8 | 8½ | 9 | 10 | 10½ | 11 | 12 | 12½ | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PER DOZ., | .85 | .85 | .85 | 1.00 | 1.10 | 1.20 | 1.50 | 2.15 | PER DOZ. | 1.20 | 1.50 | 2.15 | 2.35 | 2.55 | 2.80 | 3.05 | 3.30 | 3.50 | 3.75 | 5.00 | 6.00 |

SAMPLES SENT WITHOUT CHARGE
**THE S. M. HOWES COMPANY**
40-42-44-46 UNION STREET, BOSTON — Factory at CHARLESTOWN

# ACME Thermometers OVEN

*THE BEST IN THE MARKET*

GIVE THEM A TRIAL

STYLE "C"

2¾-INCH DIAL

MANUFACTURED BY THE

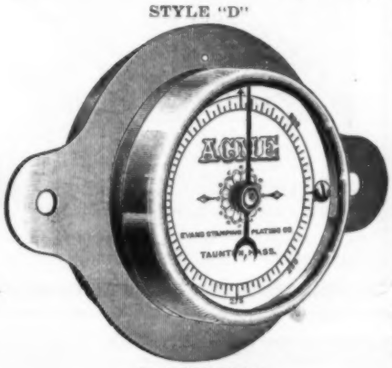
**Evans Stamping & Plating Company**

TAUNTON : : MASS.

C. H. MATTHEWS, Detroit, Mich.

(Western Agent.)

STYLE "D"




2¾-INCH DIAL

# NICKEL PLATING OUTFITS.

SEND FOR CATALOGUE OF
NICKEL & ELECTRO PLATING
SUPPLIES & POLISHING MATERIALS

ZUCKER & LEVETT & LOEB CO.
OFFICES. 526, 528, & 530 W. 25TH ST.
NEW YORK. U.S.A.

# DON'T

become as careless as the people are who drive Automobiles. Exercise care in the purchase of

## Polishers and Platers Supplies

Which means get my catalogue and prices before buying.

**F. B. STEVENS**
200-210 Larned St., West
DETROIT, MICH

ESTABLISHED 1874

The largest and most reliable **FOUNDRY SUPPLY HOUSE** in the world.

THE
**S. Obermayer Co.**

Cincinnati, Ohio. Chicago, Ill.

MANUFACTURERS OF
**"Everything You Need in Your Foundry."**

IMPORTERS AND REFINERS
**PLUMBAGO GRAPHITE**
CATALOG Sent on APPLICATION

# A Saving of Over 25%

guaranteed to ELECTRO PLATERS by the use of our

## High Grade Caustic Potash

More Speed, Cleaner Work and Greater Economy.

Manufactured by
**ROBERTS CHEMICAL COMPANY**
NIAGARA FALLS, N. Y.

# SOME MORE BOOKS

*A series of practical volumes with numerous illustrations.*

"*Practical Draughtsman's Work*," 226 illustrations. This one contains many points relative to this line of work. $1.00 prepaid.

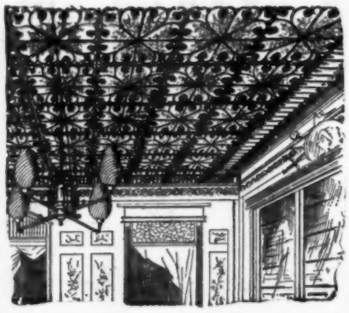
"*Practical Gas Fitting*," 120 illustrations. This one contains all practical points connected with gas fitting of every description. $1.00 prepaid.

"*Practical Stair Case Joinery*," 215 illustrations. This one contains many beneficial points for the practical workman as well as good hints for the amateur. $1.00 prepaid.

"*Practical Metal Plate Work*," 247 illustrations. This one contains numerous engravings and diagrams, and is unusually clear and true. $1.00 prepaid.

Any of these books and all others of any line can be secured upon receipt of price, prepaid by addressing

**DANIEL STERN, 69 Dearborn St., Chicago, Ill.**



## Ceilings Made For Old or New Buildings.

Berger Metal Ceilings are adaptable to plaster or wood in old or new buildings. An old store room decorated with our metal ceilings and side-walls presents the appearance of an entirely new place. Berger Ceilings are made in classified designs, especially for business places and store rooms. Write for our 12H art catalogue of metal ceilings. It's free to interested merchants.

**THE BERGER MFG. CO., Canton, Ohio.**

**Mfrs. Metal Ceilings, Roofing, Siding, Eave Trough, Conductor Pipe, Steel Office Furniture etc.**

NEW YORK, 210 E. 23rd ST. PHILADELPHIA 1215 FILBERT ST.
BOSTON, 176 FEDERAL ST. ST. LOUIS, 623 N. MAIN ST,

## ELLER'S METAL CEILINGS

TIN PLATE, CORNICE, SKYLIGHTS, BLUED AND POLISHED STOVE PIPE IRON, EAVESTROUGH, CONDUCTOR PIPE, STEEL ROOFING & SIDING ETC.

J. H. ELLER & CO. CANTON OHIO

## THE "CENTENNIAL" Rain-Water Cut-Off

The strongest, most durable and cheapest CUT-OFF on the market.

The only single Cut-off made to fit CORRUGATED and Plain Pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers. Patent applied for.

Manufactured only by
COONEY & GEIGER,
19 and 21 E. South Street,
INDIANAPOLIS, INDIANA.

"Canton" Metal Ceilings are labor savers and patron pleasers. Are best and cheapest "because the construction is right." Classified designs. Ever see our Art Book "G"? It shows the goods.

The Canton Steel Roofing Co. ("The Metal Ceiling Makers.") N. Y. Agency, No. 157 W. 23d Street.
CANTON, OHIO.

## HOMESEEKERS EXCURSIONS

On FIRST and THIRD TUESDAYS In each Month to **VIRGINIA**

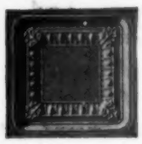
Via NORFOLK & WESTERN RAILWAY

For all information as to Rates and Tickets and for LAND PAMPHLETS and descriptive matter, address:
ALLEN HULL, D. P. Agt., Columbus, Ohio

## FOLLANSBEE BROS. CO.

PITTSBURGH.
High Grade Roofing Tins
SCOTT'S EXTRA COATED
Our own Manufacture.
Follansbee Pure Iron Old Style
Imported genuine iron base plate.
Prompt Shipment. I C and I X always in stock.

## ART METAL CEILING



EXCLUSIVE AND ARTISTIC DESIGNS APPROPRIATE FOR ANY STYLE OF ARCHITECTURE

WE ALSO MANUFACTURE
ARCHITECTURAL SHEET METAL WORK,
GALVANIZED AND COPPER CORNICES AND GUTTERS,
CURVED MOULDINGS, SKYLIGHTS,
METAL SHINGLES, METAL LATH,
FINIALS and VENTILATORS,
SPECIAL SHEET METAL WORK,
ALL STYLES ROOFING and SIDING, Etc.

WRITE FOR CATALOGS.

The Kanneberg Roofing & Ceiling Co.
CANTON, OHIO, U. S. A.

## IT WILL PAY YOU

to illustrate your advertisements in your local papers. A sheet of comic advertising cuts sent on application.

These cuts are furnished with catch lines showing their application to the hardware, stove and tinners' trades.

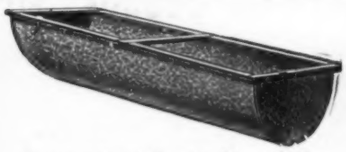
Address

**DANIEL STERN, 69 Dearborn St., Chicago**

Sheet Metal Architectural Ornaments, Statuary, Etc.

**ART METAL CEILINGS**

Roofing, Corrugated Iron, Galvanized Iron, Corrugated Conductor Pipe, Finials, Weather Vanes, Cresting, Etc., Sheet Copper.



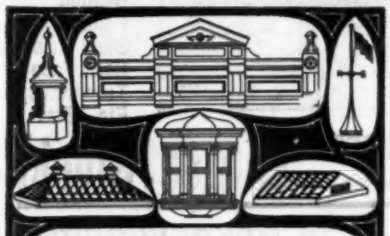
Galvanized Steel Tanks for all Purposes.

**FRIEDLEY & VOSHARDT** SEND FOR CATALOGUE A 21. 194-202 Mather St., CHICAGO, ILL.

**PLECKER'S CORRUGATED EXPANDING CONDUCTORS.**

Made of Galvanized Iron in Ten-Foot Lengths without a Cross Seam. Will not burst when full of ice.

**CLARK, QUIEN & MORSE, Peoria, Ill.**



**Cream City Cornice Co.**

MILWAUKEE, WISCONSIN

Write for Calalogue and Price List.

**Locations for Industries**

***Erie Railroad Chicago to New York.***

The Erie Railroad Company's Industrial Department has all the territory traversed by the railroad districted in relation to resources, adaptability, markets and advantages for manufacturing, and can advise with manufacturers in relation to the most suitable locations. The information furnished a manufacturer is reliable and has practical bearing on the nature of his particular industry.

Vast deposits of anthracite and bituminous coal, oil, natural gas—fuel is the paramount factor in manufacturing—sewer pipe, fire and other clays, cement material, gypsum, building stone and numerous other resources exist on the line.

It is important in this age of modern facilities for manufacturers to locate where they can obtain side tracks so as to receive from and ship directly into cars at the factory. Information can be promptly furnished in this connecton about every point on the system between New York and Chicago.

The undersigned will be pleased to furnish full information to manufacturers and local parties contemplating the establishment of new industries.

Address, **LUIS JACKSON,**
Industrial Commissioner
Erie Railroad Company,
21 Cortlandt Street, New York.

Somewhat changed yet familiar

THE TRADE MARK ON THE OLD RELIABLE

**Apollo Best Bloom Galvanized Sheets**

Now looks like this:

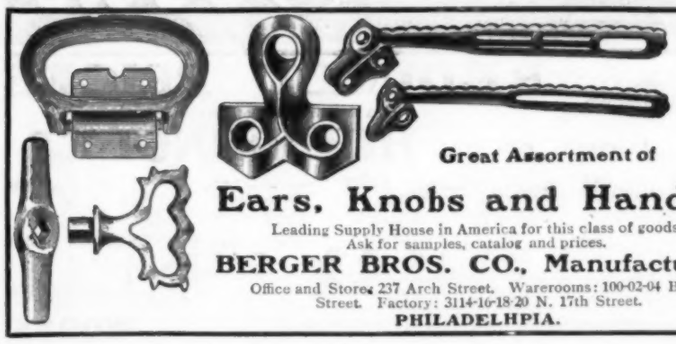
Manufactured by
**American Sheet & Tin Plate Company**
General Sales Office
Frick Building,
PITTSBURGH, PA.

AMERICAN SHEET & TIN PLATE CO. APOLLO V BEST BLOOM TRADE MARK REGISTERED PITTSBURGH

For Sale by
**All First Class Metal Houses**
in the country

**DISTRICT SALES AGENTS:**

| | | |
|---|---|---|
| Frank Dickerson, | Battery Park Building, | New York City |
| W. H. Eaton, | The Rookery, | Chicago, Ill. |
| W. J. Wetstein, | Security Building, | St. Louis, Mo. |
| R. R. Hoge, | Ainsworth Block, | Portland, Oregon |
| I. B. Williams, | Mills Building, | San Francisco, Cal. |
| Fdw. M. Sparhawk, | Equitable Building, | Denver, Col. |
| John R. Scott, | Hennen Building, | New Orleans, La. |
| W. T. Shannon, | Union Trust Building, | Cincinnati, O. |



**Great Assortment of**

**Ears, Knobs and Handles**

Leading Supply House in America for this class of goods.
Ask for samples, catalog and prices.

**BERGER BROS. CO., Manufacturers**

Office and Store: 237 Arch Street. Warerooms: 100-02-04 Bread Street. Factory: 3114-16-18-20 N. 17th Street.
PHILADELHPIA.

**Reliable Goods!** LARGEST MANUFACTURERS **Exclusive Designs!**

Eaves Trough all kinds, Conductor Pipe, Mitres, Galv. Wire Hangers, Galv. Steel Hangers, Malleable and Wrought Iron Cond. Hooks, Cutoffs, Strainers, Valleys, Cornices, Finials, Skylights, Cond. Pipe, Elbows, Etc., Etc.

Corrugated Sheets, 5/8" 1¼" 2" 2½" Steel Roofing Galv. and Painted, Roll & Cap. Self Cap. StandSeam, 2-V Crimp, 3-V Crimp, Koehn's Folded Lock Seam, Old Style Double Seam Roll Roofing, Double Cross Lock Curved Cor. Iron, Steel Awnings, Beaded Ceiling, Steel Brick, Rock Face Trimmings, Etc., Etc.

**Quick Shipments!** IT WILL PAY YOU TO GET OUR PRICES **Largest Stock!**

Send for General Catalog "B" Ceiling Catalog "C" Architectural Catalog "D"

---

**Garry Goods Are Good Goods**

Corrugated Iron and Steel Eaves Trough, Conductor Pipe and Gutters, Structural Iron Work, Roof Paints

Garry Iron & Steel Co.
CLEVELAND, OHIO

---

**It Is Acknowleaged**

by the best workmen to be the only way to close the end of an eave trough, as corrugations are Proof Against Frost. Order a set of tools today from any jobber or tinner's supply house.

**G. E. BISHOP, HARDWARE** DOWAGIAC, - MICH.

---

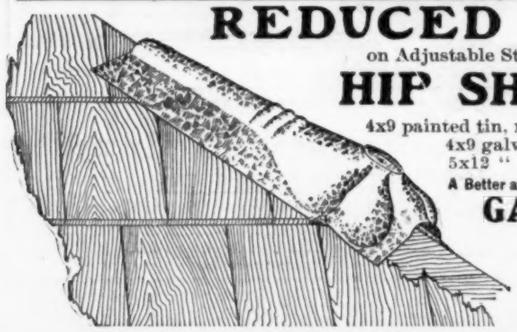
**PATENT LIGHTNING PORTABLE PUNCH**
No. 3; a high grade tool, adapted to all forms of curved or flangework; pays for itself every week in the year.

For catalog and price address

American Lock Nut Company, Oregon, Illinois.

---

**REDUCED PRICES**
on Adjustable Stamped Metal
**HIP SHINGLES**



| | |
|---|---|
| 4x9 painted tin, net, | $1.50 per hundred |
| 4x9 galv. " | 2.25 " " |
| 5x12 " " | 3.75 " " |

A Better and Cheaper Finish Than Hip Roll.

**GALESBURG CORNICE WORKS.**
Galesburg, Illinois

---

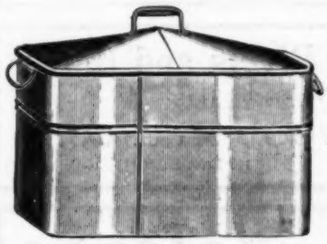
**GREAT CREDIT IS DUE**

any person who gives to his fellows any improvement which lightens their labor or enables them to do more and better work with less exertion or expense. The No 1 Fire Pot, **the acknowledged standard of the world,** is daily saving its users time and money and if other makes were offered free you could not afford to use them. **The successful man cannot afford to use anything but the latest and best tools.** Jobbers sell at factory price under the guarantee "Your money back if you are not pleased."

$6.00 Net.

**CLAYTON & LAMBERT MFG. CO.,**
DETROIT, MICH., U. S. A.

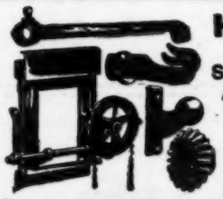
**NIAGARA MACHINE & TOOL WORKS**
MANUFACTURERS OF
**TOOLS FOR SHEET METALS.**
TINNERS' TOOLS, SHEARS, PUNCHES, PRESSES, AND DIES, CAN-MAKING MACHINERY.
BUFFALO, N. Y.



My Specialty is
**Wash Boilers**
only. I make 45 kinds and sizes. Quality best. Prices lowest. Write for Bottom-Prices.
**P. MOSHEIK** 421 S. Halsted St. CHICAGO

CROWN VENTILATOR CO. MILWAUKEE
**CROWN VENTILATORS**
DIFFERENT FROM ALL OTHERS AND BETTER
—ALSO—
**CROWN CHIMNEY JACKS**
The Cheapest Effective Smoky-Chimney Cure Made
Write for particulars and ask for Territory Rights, address of party nearest you, selling these goods, or if you would like to manufacture under our patents, so advise us.
CROWN VENTILATOR CO. Milwaukee, Wis.

**WEISS & CO., Freeport, Ill., Write:**
"We would not get along without THE AMERICAN ARTISAN at twice the price, as we get a great deal of useful information out of same."



**H. WEISS & CO.**
30 CLIFF STREET, NEW YORK.
SKYLIGHT GEARING AND CHAIN LIFTS
TINSMITHS' & PLUMBERS' TOOLS.
CORNICE MAKERS' TOOLS.
COPPERSMITHS' TOOLS.
PIPE THREADING MACHINES.

**O'HALLORAN & JACOBS**
**ROOFING SLATE**
SLATERS' SUPPLIES
829-830 Park Building, PITTSBURG, PA.

**We Can Save You**
money on Cornices, Skylights, Finials, Ventilators, Window Caps, Gable Ornaments and in fact anything in the Sheet Metal Line. Our Specialty is special work. Write for Catalogue.
**The Sheet Metal Specialty Co.**
CANTON, OHIO.

**THE POPULAR LINE**
with three elegant trains each way between Chicago and
LaFayette, Ind.
Indianapolis, Ind.
CINCINNATI, OHIO.
Louisville, Ky.
and all points in the
SOUTH AND SOUTHEAST
is the
**BIG FOUR ROUTE**
Buffet Parlor Cars, or Dining Cars on day trains and Pullman's finest Compartment and Standard Sleepers on night trains. All trains run solid, Chicago to Cincinnati. For reservations, etc., call on or address
J. C. TUCKER,
Gen'l Northern Agent,
238 S. Clark St., CHICAGO, ILL.

**ROOFING SLATE**

| | |
|---|---|
| Banger Union, | Maine |
| Sea Green, | Red |
| Purple, | Unfading Green |
| Penna. Black, | Peach Bottom. |

FOR SALE BY
THE AULD & CONGER CO.
CLEVELAND, O.

**ROOFING SLATE**
**SLATE BLACKBOARDS**

**E. J. JOHNSON & CO.**
38 PARK ROW NEW YORK
QUARRIES: Pennsylvania and Vermont
Prices quoted delivered anywhere. Booklet and complete Price List on application.
WIRE INQUIRIES GIVEN QUICK ATTENTION

# LIGHTNING

If you wish to know all about it, send us your address and you will receive our Price List and Catalogue free of charge.

SECURITY LIGHTNING ROD CO.
BURLINGTON, WIS.

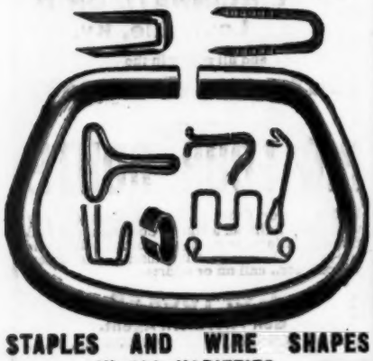
## See The Point?

**Easiest Inserted. Strongest. Best Seller.**

Buy of your Jobber, or

E. K. REA, 920 Park Ave., Kansas City, Mo.

**E. H. TITCHENER & CO.**



**STAPLES AND WIRE SHAPES**
IN ALL VARIETIES.
Binghamton, N. Y., and 42 No. Peoria St., Chicago.

## INDUSTRIES ARE OFFERED LOCATIONS

WITH

Satisfactory Inducements,
Favorable Freight Rates,
Good Labor Conditions,
Healthful Communities,

ON THE LINES OF

THE ILLINOIS CENTRAL R. R.
AND THE
YAZOO & MISSISSIPPI VALLEY R. R.

For full information and descriptive pamphlet address

J. C. CLAIR, Industrial Commissioner,
1 Park Row, CHICAGO,

# CORNICE COPPER

**SOFT AND COLD ROLLED—all sizes.**

**Boiler Sheet Copper and Bottoms.**

**All kinds of Tubing, Rod, Sheet and Wire in Copper and Brass.**

**SOLDERING COPPERS.**

**Send for stock list of what we carry in our store.**

**BENEDICT & BURNHAM BRASS AND COPPER COMPANY**
**211-213 Lake Street, CHICAGO.**

## "Eagle" Brand Copper Rivets and Burrs

STANDARD FOR QUALITY. (Lake Superior Copper)
MANUFACTURED BY

**THE PLUME & ATWOOD MFG. CO.**

29 Murray St., NEW YORK — 196 Lake St., CHICAGO, ILL.

# IWAN'S Volcano

## Revolving and Ventilating Chimney Cowl

The improvements in this chimney cowl consist in the iron mountings composed of two pieces only, no pins or wire being required to hold the cap down. The hood is also made on mechanical principles, it having a DEFLECTOR corresponding with the HOOD, by which is formed the sloped opening in the back of the hood as shown in the accompanying cut. The HOOD in connection with the DEFLECTOR fully protects the chimney from rain, sleet and snow, and currents of wind cannot suck downward into it, but on the contrary, when the wind passes through the sloped passage of the HOOD, it creates a strong upward draught, allowing free passage of smoke.

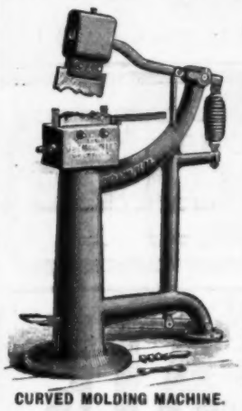
For simplicity, durability and practicability this top is unexcelled.

**IWAN BROTHERS,**
**Mfrs. of Hardware Specialties,**
**STREATOR, ILL.**

**SOMETHING NEW IN THE FORM OF A LIGHTNING ROD.**

**Is what our Pure Copper Cable Rod is. And it is a Seller—** very easy to sell, very easy to put up. Pays over 300% profit to the dealer. That is why we are getting orders from hardware men from every state in the Union. We want you for an agent. Only one dealer in a town. Write us at once and we will send sample and prices. We will guarantee our price to be far below that of any other firm manufacturing the same class of goods. Full line of fixtures.

**MAHER & SON, Preston, Iowa.**



CURVED MOLDING MACHINE.

We Manufacture a Complete Line of

## Cornice Brakes,

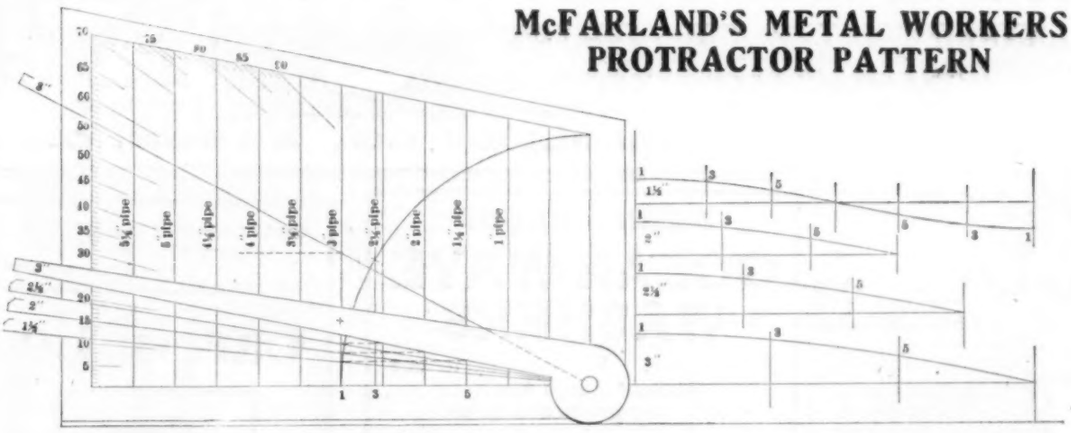
Presses, Dies, Shears, Forming Tools,

Crimpers, Corrugators, Flanging Machines, etc.

PENDULUM PRESS.

**GEO. C. KEENE & CO., Cincinnati, O.**

## McFARLAND'S METAL WORKERS PROTRACTOR PATTERN



**Providing the shortest accurate way known to lay out sheet metal elbows, with rules, including how to lay out a tapering elbow from it, will be sent by mail on receipt of 50 cents until 1905.**

**J. M. McFARLAND, 713 N. Grand Ave., Los Angeles, Cal.**

**U.S. INFALLIBLE METAL POLISH**

IN PASTE, LIQUID OR POWDER

**FOR ALL KINDS OF METALS**

Best, Cheapest, Goes Farthest. Never dries up or shrinks. Money makers for everybody. Sold by the jobbing trade. Samples free by mail. Address

**GEO. W. HOFFMAN, Manufacturer**

295 E. WASHINGTON ST., INDIANAPOLIS, IND.

BRANCHES

1 Park Row, NEW YORK CITY.
119 E. Madison St., CHICAGO, ILL.
503 Montgomery Ave., SAN FRANCISCO, CAL.
Established 12 Years.

**UNION BRICK BONDS**

**The Best Wall Ties Made**

**They Save Money**

**We Will Send You Samples Free**

**Ashler Anchors Made to Order**

**UNION BRICK BOND CO.,**

**PITTSBURGH, PA.**

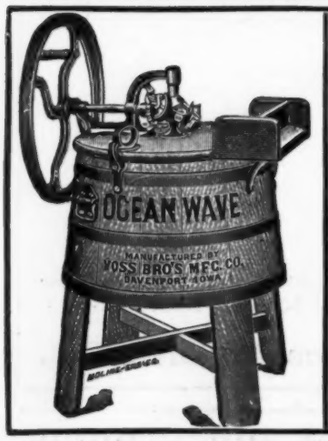
# Are You Going to the St. Louis World's Fair?

If so, don't miss seeing **Warren's Model Hardware Store,** 25x45 feet, in the first building at the right from the main entrance—Varied Industries—located on the north side directly in front of Entrance No. 16.

**ECLIPSE AKRON MASON'S PLUMB & LEVEL**

Made from clear pine, with new patent adjustable attachment.

**THE BAKER, McMILLEN CO., AKRON, O.**




*OVER 100,000*

**OCEAN WAVE WASHERS**

Now in use. We sell only to one dealer in each town.
Write for prices and terms.

**Voss Bros. Mfg. Co.**

**DAVENPORT, IOWA.**

DISTRIBUTING POINTS:

Kansas City, Council Bluffs, Sioux City, St. Paul, Milwaukee, St. Louis, Indianapolis, Detroit, Columbus, Elmira, N. Y., Albany, N. Y., Philadelphia, Pa.

The Name **"BLACKLOCK"**

found on handle of every

**SADIRON**

we produce, insures satisfaction that is always pleasing.

Your wants in this line will be best considered in addressing the

**Blacklock Foundry,** South Pittsburg, TENNESSEE.

"LIGHTNING" "GEM" "BLIZZARD"

THE BEST ICE CREAM FREEZERS in practical use, because convenient, compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or desserts with little bother and less work.

**THE ONLY FREEZERS MADE HAVING**

Cedar Pails with Electric Welded Wire Hoops,
Cans of Heavy Tin with Drawn Steel Bottoms,
AUTOMATIC Tin Scrapers.

SOLD BY LEADING JOBBERS. CATALOG SENT FREE.

**North Bros. Mfg. Co., Philadelphia.**

Cable Address—Vainica.
Codes—A B C, 4th Edition and Western Union

**Carr & Co.**

EXPORTERS OF

**Agricultural Implements Wagons, Carts**

**Grindstones, Etc.**

CORRESPONDENCE SOLICITED

**NEW YORK CITY**

**BOOKS BY MAIL**

The Publisher of the American Artisan will take pleasure in supplying books of whatever character, at catalogue prices, p epaid by mail, to any address, on receipt of price. The following are lines specially represented:

Sheet Metal Working. The Foundry. The Workshop. Heating and Ventilating. Plumbing and Drainage. Bicycle Repairing. The Store and Office.

**DANIEL STERN, Publisher and Bookseller**
69 Dearborn Street, CHICAGO

**THE CLEVELAND & BUFFALO Transit Company**

C&B LINE

CONNECTING **CLEVELAND and BUFFALO** "WHILE YOU SLEEP"

UNPARALLELED NIGHT SERVICE. NEW STEAMERS.

**"CITY OF BUFFALO" and "CITY OF ERIE"**

Both together being, without doubt, in all respects the finest and fastest that are run in the interest of the traveling public in the United States.

TIME CARD
DAILY INCLUDING SUNDAY

| LEAVE | | ARRIVE | |
|---|---|---|---|
| Cleveland | 8 P.M. | Buffalo | 6:30 A.M. |
| Buffalo | 8 " | Cleveland | 6:30 A.M. |

CENTRAL STANDARD TIME

Orchestra Accompanies Each Steamer

Connections made at Buffalo with trains for all Eastern and Canadian points, at Cleveland for Toledo, Detroit and all points West and Southwest.

Tickets reading over L. S. & M. S. Ry, will be accepted on this Company's Steamers without extra charge.

Special Low Rates Cleveland to Buffalo and Niagara Falls every Saturday Night, also Buffalo to Cleveland.

Ask Ticket Agents for tickets via C. & B. Line
Send four cents for illustrated pamphlet.

**W. F. HERMAN, G. P. A., Cleveland, Ohio.**

# The "PARAGON" CYLINDER WASHER

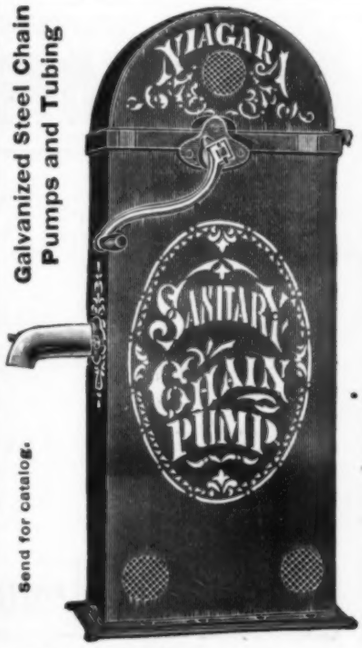
The "PARAGON" is unique in that it has no hoops to drop off or tub to fall down. It has no complicated machinery; therefore no broken parts to be replaced. It keeps the heat and steam inside the washer. It does not "roll" or "wad" the clothing. The "Paragon" is rigidly constructed and has an elegant and finished appearance.

Chas. M. Brooks, of Moweaqua, Ill. writes:—

"I am meeting with good success with your Paragon Washers, and am selling them very readily at $10.00 each. I would like to have you instruct your other dealers, if you have any in this vicinity, to sell the Paragon at the same price, so that we may not clash in prices. They would reap a better profit with less friction, and would do just as much business.

**J. M. GAGAN & CO.** Manufacturers
CHICAGO, U. S. A.

Galvanized Steel Chain Pumps and Tubing




Send for catalog.

**SANITARY PUMP & TUBING CO.**
QUINCY, ILLINOIS.

# Let the WHITE LILY Do the Work.

Secure the AGENCY for the

## White Lily Washing Machine

It is the Best Seller on the Market.

HIGH SPEED LIGHT RUNNING HANDSOME FINISH and GUARANTEED.

**Only one dealer in each town can get them. Write for particulars.**

**WHITE LILY WASHER CO.**
TOLEDO, Ohio, - DAVENPORT, Iowa.

"White Lily Washers wash lily white."

# 4 in. I-Rack Brackets

Makes Wagon Box, Hay, Hog and Wood Racks made from best malleable iron.

Farmers seeing these will have no others.

**Over 30 Jobbers ve them, including**

Hibbard, Spencer, Bartlett, & Co. Chicago, Ill.
Farwell, Ozmun, Kirk & Co., St. Paul, Minn.
Norwell, Shapleigh & Co. St. Louis, Mo.

**Price to Dealers, $2.00. Retail, $2.75.**

To get them introduced will make 3 Sets for $6.00, F.O.B. at any station east of Missouri River. This offer is good for first order only. 2% 10, 30 net if ordered at once direct from me.

**Ask for Circulars and further Information.**

**J. T. SWAN, Auburn, NEB.**

DEALERS WHO SELL THE NEW

# Pelouze Family Scales

with the handsome silver finished dials sell the **best** in the scale maker's art.

**Capacity, 24 pounds by ounces. Warranted.**

The springs used in all Pelouze Scales are made of the best crucible cast steel wire.

Every scale has a patented adjusting screw; cannot fall off and cause trouble.

*Ask your jobber for the Pelouze make*

Send for Catalogue G; 40 styles.

**PELOUZE SCALE & MFG. CO.**
118-130 W. Jackson Boul., CHICAGO

# 4 Trains a Day

via the

**MONON ROUTE**
CHICAGO INDIANAPOLIS & LOUISVILLE RAILWAY

and C. H. & D. Ry.

## Only 8 Hours from CHICAGO to CINCINNATI

**BY DAY, Parlor and Dining Cars**
**BY NIGHT, Palace Sleeping and Compartment Cars.**

CHAS. H. ROCKWELL, Traffic Manager. FRANK J. REED, Gen. Pass. Agt.
200 Custom House Place, CHICAGO.

# Do You Know

## That the O. K. WASHING MACHINE

is the best made, the lightest running and the most attractive washer on the market? *Are you selling it? If not, why?* Every first-class dealer should sell it, because it is made of the best materials, by the best mechanics that can be obtained, and every one sold will sell another.

*Write us for Circulars and Prices.*

**H. F. BRAMMER MFG. CO.** Dept. B. DAVENPORT, IOWA

**J. F. LEWIS, Cisco, Ill.,** *Writes*
*"I cannot get along without The American Artisan"*

# The "HOME" Ball-Bearing Washer

THIS cut shows our "Home" Ball-Bearing Washer as it stands ready for the washing. This washer has but one automatic spring. The wringer, when used to wring out the clothes, is fastened to the tub, and when the washer is operated the wringer must be removed from the tub. The tub is not removable as in the "1900 Junior" and on the "Domestic."

The tub is made of pine and bound with flat steel hoops. The ball-bearings of this machine are the same as in the "Domestic" washer.

The "Home" is offered at a price that defies competition.

**"1900"** **"DOMESTIC"** **"1900 JR."** **"HOME"**

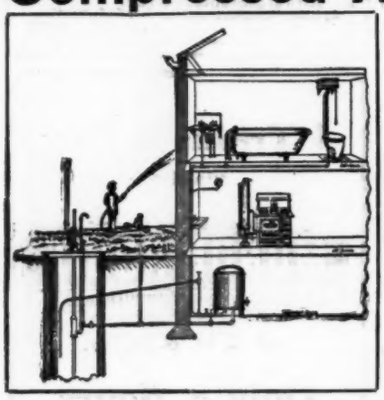
**EACH A WINNER.**

We advertise liberally in magazines and refer all inquiries to nearest dealer. Send for Catalogue.

## THE 1900 WASHER CO.

**BINGHAMTON, N. Y.**

## Are You Interested In a Compressed Air System of Water Supply?



**OURS WILL INTEREST YOU.**

**Below we give you a sample of one of a great many letters we receive DAILY.**

Office of W. H. Horrum, Contractor and Builder and Manufacturer of Brick.

AUBURN, NEBRASKA, March 20th, 1897.

Messrs Horigan Supply Co., St. Joseph, Mo.

Gentlemen:—Your letter of inquiry asking if you may use my name for reference regarding your Water Works, would say that I can cheerfully endorse it. Myself and wife think it is one of the best house appliances of the present day. We have plenty of water for bath tub, basin and water closet, in fact for any use that may be wanted. We are exceedingly well pleased with its operation. We are, as you are probably aware, using a hand pump which requires about 15 minutes' pumping, say twice a week. We would dislike very much to return to the old method of carrying water, to say nothing of the fact that we would have to discontinue the use of our plumbing fixtures. I endorse it without reserve.

Respectfully yours,

W. H. HORRUM.

**SEND FOR CIRCULAR AND PRICES.**

**HORIGAN SUPPLY CO. : : ST. JOSEPH, MO.**

**The MARTINI in a COCKTAIL**

**is like a**

**WELL-PLACED ADVERTISEMENT---**

**IT BRINGS RESULTS.**

# Sunshine "ALUMYNOID" WASHING MACHINES

## THE "WHITE DASHER" LINE

**Absolutely Rust Proof**

Weight 50 pounds
No Wood

## THE XXTH CENTURY NOVELTY

**Light---Durable**
**Sanitary---Clean**
**Simple---Scientific**

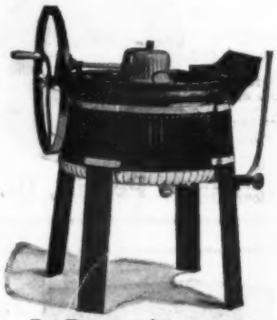
White Porcelain
Enameled Iron Dasher
Note Balance Wheel

When you see a bright, silver dollar on the street, pass it by. It may be hot.

When you see a rusted dollar nesting comfortably in a nest of grass, grab it. "You saw thru."

Dollars are something like Washing Machines. Some of them are too tempting.

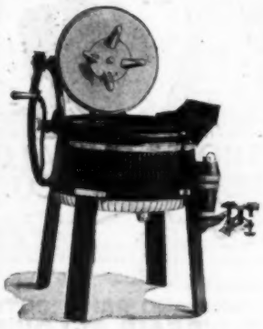
We noticed a few years ago, a heavy demand for a first-class, All-Metal Washing Machine—one that would combine Lightness with Strength and Wearing Qualities, and yet be Sanitary and Absolutely Rust Proof. After exhaustive experiments, we succeeded in producing a metal in which is embodied all these special requirements. "Alumynoid" is a combination of aluminum, tin and spelter. The metal is not coated or plated, but is solid all through.



Gas Burning Attachment

**THE BOTTOM** is stamped of one piece of "Aluminoid." It is higher in the center and has rounded edge. It is provided with a drain channel to which the faucet is attached for drawing off the water; the faucet has ⅞-inch opening and is rust-proof.

**THE DASHER** is made of one piece of iron, triple coated with white porcelain enamel. This is an original feature. There are no pegs to fall out and become lost. In addition to being clean and Sanitary, it is Absolutely Rust-Proof.



Gasoline Burner
Ready for Use

*One man's gain means another's loss. The gainer is the patriot.*

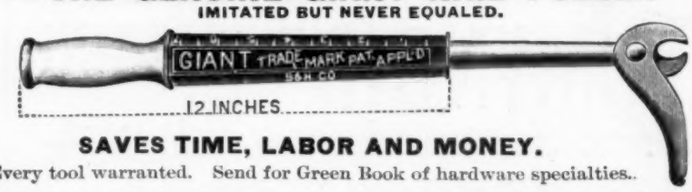
Mr. Dealer.—When you salt away a few more dollars each day than Mr. E. Z. Mark around the corner; when you tear out the partition between the next store and yours, or build a shed in the rear; when you get time to look around and see E. Z.'s wife with the grocery basket, while yours is learning how to drive a coach-and-four—when you do, does it ever strike you, that you are helping the country as much as yourself; that you are the patriot—the one for whom Independence Day was set aside? It's every one's duty to "lead the strenuous life." It's up to you to kill off the weak and degenerate. You will make the country stronger for it. Your children will be stronger. Invalids and freaks don't help in commercial invasions. Nor do they make men better than animals. "The survival of the fittest" is a good principle. It works with us. We are looking around for the "fittest." If you've got a champaign taste and a beer purse, you're on the road. Write us. You're the kind we want.

Burner Boiling Water
With Washer in Operation

# QUINCY WASHING MACHINE CO., QUINCY, ILL.

## THE GENUINE GIANT NAIL PULLER

IMITATED BUT NEVER EQUALED.




**SAVES TIME, LABOR AND MONEY.**

Every tool warranted. Send for Green Book of hardware specialties.

**SMITH & HEMENWAY CO.** Mfrs. of Cutlery and Hardware Specialties.

**UTICA DROP FORGE & TOOL CO.** Mfrs. of Nippers and Pliers.

296 BROADWAY, NEW YORK CITY.

## IMPROVED Oblique Tumbling Barrel

Barrel can be adjusted to run in any desired position, thus rattling the parts more or less violently to suit the material from which they are made.

Send for Catalogue A.

**The Globe Machine & Stamping Co.**
971 Hamilton St., Cleveland, O.

## Cronk's Wire Cutter and Bender No. 1.

This plier is made of tool steel and combines both flat and round nose in one, the concave and convex circles between the handles being used for bending wire in any desired shape.

THE CRONK & CARRIER MFG. CO., ELMIRA, N. Y.

## The ECLIPSE Nested Stove Pipe Thimble

BEST ON THE MARKET

PATENT PENDING

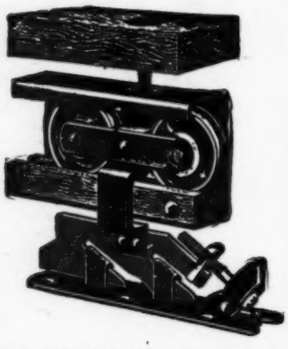
Saves 80 per cent of room.
Is stronger than a hand made riveted thimble.
Is always ready to hook together.
Is made that the lug passes through two slots and then tied.
The lug is always on top; therefore the LUG is not an objection to the entering stove pipe.
It is always kept nice and clean in a box therefore no unsightly rusty looking thimbles to adorn the stores.
Galvanized iron; 5, 6 and 7 inch.

**STUBER & KUCK,** Manufacturers of Pieced Tinware and all Styles Flour Sifters **Peoria, Ill.**

## PERFORATED METAL

THE ROBT. AITCHISON PERFORATED METAL CO.
303-305 DEARBORN STREET, CHICAGO, ILL.

## RICHARDS AUTO



Ball-Bearing, Noiseless, House Door Hanger combines all the best features and is a trade winner.

We make all the leading styles of door hangers for sliding doors. Catalogue free.

**THE RICHARDS MANUFACTURING CO.**
AURORA, ILL., U. S. A.

## $3.00 SAVED

TO ALL POINTS EAST AND WEST VIA THE D&B LINE.

"Just Two Boats" BETWEEN DETROIT & BUFFALO

THE LAKE AND RAIL ROUTE
WORLD'S FAIR, ST. LOUIS
DAILY SERVICE, MAY 26th

Improved Express Service (14 hours) Between

DETROIT AND BUFFALO

Leave DETROIT Daily - 4.00 P. M.
Arrive BUFFALO " - 7.30 A. M.

Connecting with Earliest Trains for all Points in NEW YORK, PENNSYLVANIA and NEW ENGLAND STATES.

Leave BUFFALO Daily - 5.30 P. M.
Arrive DETROIT " - 7.30 A. M.

Connecting with Fast Express Trains for WORLD'S FAIR, ST. LOUIS and THE WEST, with D. & C. N. Co. for Mackinac Island and Northern Michigan Resorts.

Rate between Detroit and Buffalo $3.50 one way, $6.50 round trip. Berths $1.00, $1.50; Staterooms $2.50 each direction.

Send 2c Stamp World's Fair Illustrated Pamphlet.
Send 2c Stamp Tourist Pamphlet Rates.

RAIL TICKETS HONORED ON STEAMERS

First-class, Second-class, Tourist Special, Conventions (World's Fair, St. Louis) reading via Grand Trunk Ry. or Michigan Central Ry. between BUFFALO and DETROIT will be accepted for Transportation on D. & B. Stms. { *A. A. Schantz, G. S. & P. T. M., Detroit, Mich.*

8¼ inches long. Jaws take from 1/16 to ¾. Cuts bolts for pump rods.

5 IN 1
NUT WRENCH, PIPE WRENCH, THREAD CUTTERS.

SPECIAL WRENCH FOR PUMP RODS.

Has more uses than any wrench made.

You can't break the jaws off this wrench.

Will Remove
'NEVERSLIP" and "ROWE" CALKS
The Best Wrench Made

Every one buys HAWKEYE WRENCH on sight; all that's necessary to sell it is to show it. It should be in every Hardware Store. Be the FIRST in your town to have it in stock.

SOLD BY ALL JOBBERS.

HAWKEYE WRENCH CO., Mfrs., Marshalltown, Ia

Made in two styles—different size thread for Pump Rods.

**SOLID STEEL, DROP FORGED, MALL. D. or Plain Long Handle "ALASKA" SNOW SHOVELS.**

Orders now being booked for Fall Delivery.
We will be glad to send you catalogue and price lists of our complete lines of Winter Goods, Cooking Utensils and Shovels, Spades and Scoops. We have something new in Shovels.

**THE AVERY STAMPING CO., Cleveland, Ohio.**

*"The First and only makers of 'NEVER BREAK' Goods."*

**Magic Pattern Rule**

**Lufkin Rule Co.,**

**Saginaw, Mich.**

**Will lay out patterns for any size and angle of elbows in three minutes' time. Can also be used as Straight-edge Rule, Circumference Rule and Trammell. Should be in every Tinshop. Will save its cost in a few weeks. Thousands are in use and every one giving excellent satisfaction. Price, complete in a nice wooden box with Chart, $4.00 net cash.** (Mention THE AMERICAN ARTISAN.)

**STANLEY RULE AND LEVEL CO.**

**Improved Carpenters Tools**

***Sold by All Hardware Dealers. NEW BRITAIN, CONN.***

**"PULLMAN"**

**Sash Balances**

Are you selling them?

**In use everywhere. Look for the Metal Tapes in all New Buildings.**

Folder No. 2 sent free.

**PULLMAN MFG. CO.,**
**ROCHESTER N. Y., U. S. A.**

**FIRE - PROOF WINDOWS**
**(Patented)**

Made of Galvanized Iron.
Glazed with Ribbed or Wire Glass.
Operate Automatically or Otherwise.
Approved universally by Insurance Companies.
Write for Catalog and Prices.

**THE W. J. BURTON CO.**
**Detroit, Mich.**

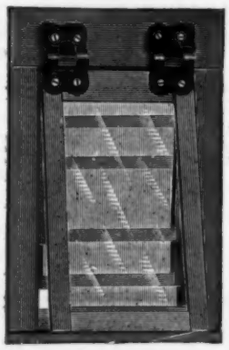
**HAND SCREWS**

The best on the market. The spindles or screws are made of the best selected hickory and the jaws of thoroughly seasoned maple and beech.

We make a specialty of Hand Screws and Cabinet Makers Tools.
We are headquarters for Planes, Plane Irons, Hoes, etc.

**Sandusky Tool Co.**

**New York Office 26 Warren St.** **Sandusky, O.**



**Gossett's Suspension Hinges**

FOR FULL-LENGTH WINDOW SCREENS

Made of steel, japanned. Every pair perfect.

**Beware of cheap, cast substitutes.**

If your wholesaler does not handle GOSSETT'S

WRITE THE MANUFACTURER,

**F. D. KEES, : : Beatrice, Nebraska.**

# Hill's FAMOUS CLOTHES DRYER

**For Lawns, Fire Escapes, window balconies, and piazzas**

**BEST AND MOST POPULAR DRYER IN THE WORLD.**

Samples to Dealers at Trade Prices.

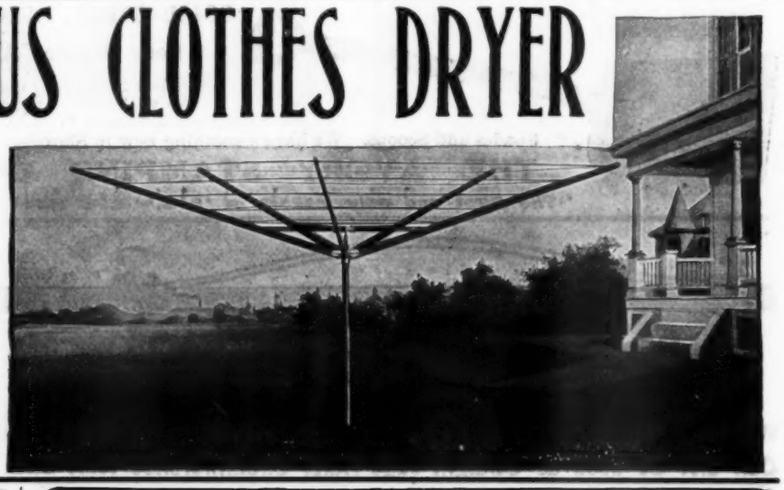
We Also Make the **HUSTLER ASH SIFTER**
THE GREAT COAL SAVER

Made Only By

## HILL DRYER CO.

**Worcester, Mass.**

**New York Office, 373-375 Broadway**
**29 New Montgomery St., SAN FRANCISCO, CAL.**



## THE KING
### Cream Separator

separates all the cream. No cranks to turn, no crocks or pans to wash, no skimming to do, no water mixed with the milk. Highest points secured on butter, several thousand sold last year, all giving good satisfaction, price within the reach of all. Write for terms and prices. Mention this paper.

**CHAS. A. VAN PELT,**
**Bloomington, Ill.**

## CLOTHES DRYERS

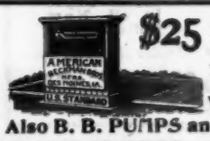
are a necessity in Hotels, Hospitals, Sanitariums, Reformatories, Laundries, Apartment Houses and Modern Residences. "Canton" Clothes Dryers are a model of perfection and are most economical. There is no waste heat, as heat for the flat-irons, boiling the clothes and heating the dryer is all from the same stove. **A field that is not overcrowded. Big Profits. Quick returns. Do you want the agency for your city? Write quick. Catalogue tells all. Get one.**

**The Canton Clothes Dryer & Mfg. Co.,**
**Office and Works, Canton, Ohio.**
**New York Office, 157 W. 23rd St.**

SEE THAT PEERLESS TIE?

WE MANUFACTURE
PEERLESS WOVEN WIRE FIELD FENCE, POULTRY & GARDEN FENCE, ACME NETTING, LAWN AND CEMETERY FENCE, GATES, PORTABLE CORN CRIBS, ETC. ETC.
CATALOGUE FREE.

**THE DENNING FENCE WORKS**
CEDAR RAPIDS, IOWA.



**$25 ON 5 TON**
Is what you can save
We make all kinds of SCALES.
WRITE FOR PRICES

**Also B. B. PUMPS and WIND MILLS**
**BECKMAN BROS., Des Moines, Ia.**

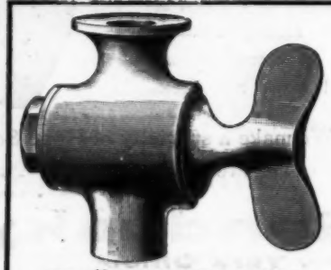
## THE LATEST IMPROVED CREAM SEPARATOR.

The best cooling process. The milk tank is detachable.
Our Separator is guaranteed to do the work.

The cheapest and best deep setting Separator on earth.

WRITE FOR PRICES.

**SEITHER-CHERRY CO.**
**KEOKUK, IOWA.**



The "OMEGA," 2-3 Size.
To attach to bottom of can.

**BEER, MILK CAN, OIL CAN, CREAM SEPARATOR**

## FAUCETS.

**Various Sizes and Styles.**

MANUFACTURED BY

**CLARK NOVELTY CO.,**
**ROCHESTER, N. Y.**

Also Mfrs. of The CLARK Kerosene Oil System for heating Soldering Coppers.

## SPERRY'S STEAM KETTLES

Made from very thick metal, without Stay Bolts, joint packed in such a manner as to never need repacking. A little higher priced than some, but they are safe and tight : : : : : :

**D. R. SPERRY & CO.** Hollow-Ware Founders, **BATAVIA, ILL.**

THE BRAND **'DISSTON'** ON SAWS, ETC.

IS A **GUARANTEE** OF

**SUPERIOR QUALITY AND WORKMANSHIP.**

**SAWS**

HAND, BACK, GAUGE, COMBINATION, HACK, JOINERS, KEY-HOLE, NEST, COMPASS, PATTERN-MAKERS, DOVETAIL, MITRE-BOX, PLUMBERS, PRUNING, SQUARE-HOLE, STAIR-BUILDERS, TURKISH, WOOD SAW, BUCKS, RODS, BLADES, WEB, BUTCHER, KITCHEN, DEHORNING, SAWKNIFE, ETC., ETC.
CIRCULAR, BAND, BARREL, BILGE, MITRE, CONCAVE, CYLINDER, STAVE, SEGMENT, RE-SAWS, RIFT, GROOVING, VENEER, SHINGLE, SIDING, TOP-SAWS, SLATE, EDGER, MILLING, DISCS, DEAL, CROSS-CUT, PIT, WHIP, DRAG, MILL, BUTTING, MULAY, GANG, ICE, ETC., ETC.

**TOOLS**

SQUARES, BEVELS, GAUGES, LEVELS, PLUMB & LEVELS, TROWELS, SCREWDRIVERS, PLUMB-BOBS, STEEL RULES, STRAIGHT EDGES, CABINET SCRAPERS, SLAW CUTTERS, CROUT CUTTERS, SWAGES, SAWSETS, MANDRELS, GUMMERS, SAW JOINTER, SAW CLAMPS, FILES, KNIVES—CLOTH, CORN, CANE, CORK, HEDGE, MACHETTES, ETC.

**WE MANUFACTURE THE FINEST AND LARGEST LINE OF SAWS IN THE WORLD.**

**HENRY DISSTON & SONS, INC.**

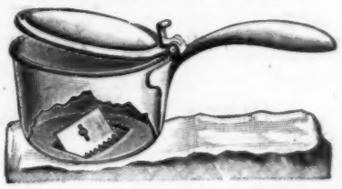
KEY STONE, SAW, TOOL, STEEL & FILE WORKS,

**PHILADELPHIA, PA.**

STANDARD FOR QUALITY **"ENTERPRISE"**

**ICE SHREDDERS**

For Shaving Ice, Coarse or Fine.

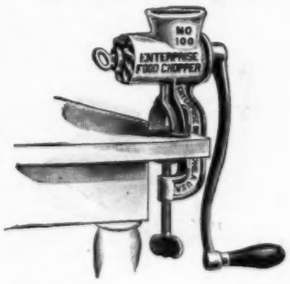


| | Per Doz. |
|---|---|
| No. 33, Tinned, - | $6.00 |
| No. 34, Nickeled, - | 15.00 |

**LAWN SPRINKLER**

No. 1, - - $3.50

**FOOD CHOPPERS**




No. 100 - $1.50
No. 300 - 2.25

**Rapid Grinding and Pulverizing Mills**

48 Sizes and Styles for Hand, Steam and Electric Power.

No. 2, - $3.75

**CHERRY STONERS**

5 Sizes and Styles, Tinned or Japanned

No. 1, - $7.50 per Doz.

ORDER THROUGH YOUR JOBBER. CATALOGUE MAILED FREE.

THE ENTERPRISE MFG. CO. OF PA., PHILADELPHIA, U. S. A.

# "VOLLRATH WARE"

"THE WARE OF QUALITY"
"HIGH ART"

**ENAMELED SHEET STEEL AND CAST IRON WARES are characteristic in dignity.**

**An Artistic World's Fair Booklet** shows twelve of our different lines, exact reproductions of our wares, giving their names.
**A Handsome Catalogue** illustrates and gives capacity, sizes, weights and lists of every item manufactured by us in both sheet steel and cast iron wares. Either or both, will be sent, free postpaid to Hardware Dealers upon request of mail order department, Chicago.

THE INTERNATIONAL ENAMELED WARE

## THE JACOB J. VOLLRATH MANUFACTURING CO.

CHICAGO OFFICES AND SALESROOMS
175-177 Lake St., Chicago, Ill.—MAIL ORDER DEPT.

Works and General Offices
SHEBOYGAN, WIS., U. S. A.

BRANCHES: New York, 25 Warren St.: Minneapolis, 1212-14 Commercial Bldg.: San Francisco, 409 Market St.: St. Louis, Block 7B Manufacturers Bldg.

# ABSOLUTE PURITY

IN KITCHEN UTENSILS
**FREEDOM FROM POISON**
**is hereby guaranteed**

WE MAKE

AGATE L & G MFG. & Co. NICKEL-STEEL WARE

1520 KINDS

*The Blue Label on every piece proves our statement.*

**When you buy Kitchen-Ware, buy**

**AGATE NICKEL-STEEL.**

LALANCE & GROSJEAN MFG. CO.
New York Boston Chicago

We're not particular whether you use pencil or pen—either one will do—just so you write to us and find out full particulars regarding our New Oil Stove. It's called

**NESCO-LAMP-STOVE**

You can't help but create a demand for this stove—it certainly is a dandy—an addition to any hardware or stove dealer's line.

We have done everything in our power to make this stove nearer perfection than any stove ever manufactured. Write to our nearest office for particulars.

**National Enameling & Stamping Co.**

MILWAUKEE CHICAGO NEW YORK
BALTIMORE ST. LOUIS
NEW ORLEANS

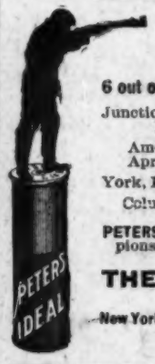
You Would be Surprised at our prices for **ROOFING TIN**

If you had an idea of the quality. The fact that we make all our own plates explains why we can furnish such material for the price. A postal will get you sample set "A."

**THE McCLURE COMPANY**
PITTSBURG PHILADELPHIA
MILLS: Washington, Pa.

# PETERS LOADED SHELLS

**ARE WINNING NEW LAURELS!**




Some Recent Victories
Captured With Peters Shells:

**6 out of 9 Missouri-Kansas Interstate Team Matches.**

Junction City, Kans., May 3-6. — State Event at Live Birds. State Championship at Targets. 1st and 2nd Amateur Averages.
Americus, Ga., April 27 and 28. — 1st and 2nd Amateur Averages.
York, Pa., May 16-21. — 1st Amateur Average. Penn'a. State Championship.
Columbus, Neb., May 18. — 100-Target Gun Event, score 96.

**PETERS CARTRIDGES** have won the Indoor Rifle Championship of the United States **seven successive years.**
For sale by the leading jobbers.

**THE PETERS CARTRIDGE CO.,**
**CINCINNATI, U. S. A.**
New York, 98 Chambers St., T. H. Keller, Mgr.
Hibbard, Spencer, Bartlett & Co., Chicago.
Pacific Hardware & Steel Co., San Francisco

FOR
**METAL CEILINGS**
write us. It will pay you.
**ILLINOIS ROOFING & SUPPLY CO.**
23 Lake St., CHICAGO.

## Champion Stove Clay

The only Stove Lining made of crucible materials.
Packed in 2¼ lb., 6 lb. and 10 lb. pasteboard boxes.
Order it from your jobber.
The best and most refractory lining made.

**BRIDGEPORT CRUCIBLE CO.**
**BRIDGEPORT, CONN.**

# STEVENS

IT is most encouraging for a Dealer to be vigorously supported in the sale of manufactured products.

**STEVENS consistent "Co-operation PRICE-PROTECTION" Policy,**
has made it an object for Retailers to handle STEVENS ARMS.

Our popular line of RIFLES, PISTOLS, SHOTGUNS and ACCESSORIES sells readily, and *always satisfies the customer.*

Leading Jobbers handle the STEVENS.
Specify these goods when ordering.

Our 1904 Illustrated Catalog (136 Pages) is a necessity for every Hardware and Sporting Goods store. Send for it; it's FREE.

**J. Stevens Arms & Tool Co.,**
197 Main Street,
CHICOPEE FALLS, MASS., U. S. A.

**BRADLEY SHELF BRACKETS**
STRONG, LIGHT AND ALL RIGHT
ATLAS MFG. CO. NEW HAVEN, CT.

**Osgood Standard SCALES.**
ASK YOUR JOBBER ABOUT THEM.

## The "Globe" Ventilator

In Brass, Copper, Galvanized Iron, and with Glass Tops for Skylight purposes.

**For Perfectly Ventilating**
Schools, Churches, Halls, Mills, Factories and Audience Rooms of Every Character.

**Smoky Chimneys Cured.**
"Globe" Ventilated Ridges.
Send for Pamphlet.
Manufactured by
**Globe Ventilator Co., Troy, N. Y.**

Advertisements never demand bigger salaries, never have ennui or hang-overs. They never get irritable and insult old customers. They are Johnnies-on-the Spot.

# Put This Down as a Fact

**ATKINS ALWAYS AHEAD**

When a man insists on having **Atkins Saws,** you may know that he has used them before and knows what he's talking about. It's no use to offer something "just as good", because he'll have **Atkins Saws** if he has to go elsewhere to get them.

It's better to be on the safe side and have a line of **Atkins Saws** always in stock. They're good for your store.

Have you a copy of our 1904 Catalog? Free.

**If It's Silver-Steel It's an ATKINS**

**E. C. ATKINS & CO.,**
**Indianapolis, Ind.**

**Branches** MEMPHIS, TENN. ATLANTA, GA. NEW YORK CITY TORONTO, CANADA. CHICAGO, ILL. MINNEAPOLIS, MINN. PORTLAND, OREGON. SEATTLE, WASH.